



PRINCIPALS' UTILIZATION OF DIGITAL TOOLS FOR JOB PERFORMANCE IN SECONDARY SCHOOLS IN ANAMBRA STATE

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Abstract

The difficulties encountered by most principals in executing their administrative responsibilities in secondary schools in Anambra State, which seem to be worrisome, was the reason for conducting this study.

This study assessed principals' utilization of digital tools for job performance in secondary schools in Anambra State. Three research questions guided the study. A descriptive survey design was employed in the study. Population for the study comprised 259 principals from all the public secondary schools in the 6 education zones in Anambra State. Sample size of the study constituted 207 (80 percent) principals from 207 public secondary schools in the 6 education zones selected using the stratified random sampling technique. A 29-item researcher-developed questionnaire structured on a 4-point scale of Highly Utilized (HU), Utilized (U), Less Utilized (LU) and Not Utilized (NU) was used for data collection. The instrument was titled "Principals' Utilization of Digital tools for job Performance Questionnaire (PUDTJPQ)". The PUDTJP was face validated by two experts from the Department of Educational Management and Policy, and one Measurement and Evaluation expert from the Department of Educational Foundations, Nnamdi Azikiwe University, Awka. Reliability of the research instrument was established through a pilot-test carried out once on a single administration sampling 20 principals in some selected 20 public secondary schools in Enugu State. Data collated after the pilot test were measured using Cronbach Alpha statistics which gave internal consistency reliability coefficient r-value of 0.82. Data collated were analyzed using mean scores rated at 2.50 and standard deviation statistics. Findings of the study revealed that the principals did not utilize many of the digitalized tools for their job performance in secondary schools in Anambra State. From the findings, recommendations were proffered and among them were that, Anambra State Government in collaboration with educational authorities and institutions such as the Post Primary Schools Service Commission (PPSSC) should prioritize investment in professional development programmes tailored to equip principals with the necessary digital literacy skills and competencies. These programmes should focus on enhancing principals' proficiency towards utilization of social networking tools, Artificial Intelligence (AI) tools and Microsoft Office Software tools effectively for their job performance in executing all their administrative tasks, duties and decision-making in schools.

Keywords: *Principals, Utilization, Digitalized, Tools, Job, Performance, Secondary, Schools*

Introduction

The Nigerian secondary education is one of the important levels in every student's academic life. In Nigeria, education provided in the secondary schools prepares students for higher education. Secondary schools prepare students for their future employment and world of work. According to Bashar and Yasin (2020), secondary education is acquired after successful completion of basic/primary education in the secondary schools before tertiary level education by students aged 11 to 17 years, which prepare them for useful living within the society and for higher education. Therefore, secondary education in Nigeria serves as a proxy between the primary education and higher education. This level of schooling, covers all-round development of an individual which enables one to get practical skills, creativity, innovativeness, advancement of mental, physical and social



capacities that will empower one to live, produce and add to the improvement of the general public in which one lives (Bashar & Yasin, 2020). The secondary schools as indicated by the Federal Republic of Nigeria (FRN, 2014) in the National Policy on Education (NPE) has been established to achieve certain goals and objectives which include to: offer diversified curriculum to cater for the differences in talents, dispositions, opportunities and future roles; provide trained manpower in the applied sciences, technology and commerce at the subprofessional grades; provide entrepreneurial, technical and vocational job-specific skills for self-reliance, and for agricultural, industrial, commercial and economic development; inspire students with a desire for selfimprovement and achievement of excellence; foster patriotism, national unity and security education with emphasis on the common ties in spite of our diversity; raise morally upright and well-adjusted individuals who can think independently and rationally, respect the views and feelings of others and appreciate the dignity of labour, among others. Attainment of the goals and objectives of secondary schools lies more in the hands of the principals who are the chief custodians in both administration and management of secondary schools. Principals are at the top and apex ladder in the general school administration. They coordinate and control the daily activities of the secondary schools. According to Akpakwu (2012), principals are chief custodians in the management of schools that coordinate all the curricular and extra-curricular activities of the Nigerian secondary schools. To successfully achieve all educational goals and objectives especially in this digital and technological age and era, the principals should be familiar with the utilization of digitalized tools for their job performance in secondary schools.

Digitalized tools as described within the context of this present study involves the use of computer and emerging technologies to execute their functions effectively in and outside the school premises. Digitalized tools refer to technological resources and software applications used by educational administrators, such as principals, to optimize job performance and streamline administrative tasks within secondary schools. Examples of digitalized tools include Learning Management Systems (LMS) like Moodle or Blackboard for course management and online learning, and communication platforms such as Slack or Microsoft Teams for facilitating collaboration and communication among staff members (Chen & Hung, 2016; Sağlam & Çakıroğlu, 2020). They encompass a diverse range of digital technologies and software applications utilized by educational leaders to enhance organizational efficiency and effectiveness in secondary schools. These tools may include data analytics software for decision-making, virtual meeting platforms such as Zoom or Google Meet for remote collaboration, and project management tools like Trello or Asana for task organization and tracking (Shah, 2019; Taylor & Newton, 2020). Digitalized tools according to Mishra and Kereluik (2014) encompass a wide array of digital technologies and software applications that are utilized by educational administrators, such as principals, to facilitate various aspects of their job performance and administrative functions within secondary schools. These tools are characterized by their digital nature and are often employed to streamline tasks, enhance communication, analyze data, and support decision-making processes in educational leadership contexts. Examples of digitalized tools as grouped by Jackson (2019), Smith (2018); Van den Akker, Gravemeijer, McKenney and Nieveen (2020) include: social networking tools, Artificial Intelligence (AI) tools, and Microsoft Office Software tools. The use of digitalized technology therefore, has supported learning in the classroom, leading to increased student achievement, bridging the student achievement gap and reducing the number of students dropping out of school (Hamzah, Nasir & Wahab, 2021).

On the other hand, principals job performance as described in this study can be viewed as the functions, roles, duties and responsibilities accomplished by principals in school for the achievement of educational goals and objectives. Job performance in educational leadership contexts can be defined as the extent to which school principals effectively fulfill their roles and responsibilities, achieve organizational goals, and positively impact student outcomes through the application of leadership practices, decision-making abilities, and interpersonal skills. It encompasses not only the measurable outcomes related to administrative tasks and school management but also the intangible aspects such as instructional leadership, relationship-building with staff and stakeholders, and fostering a supportive learning environment conducive to student success (Hallinger, 2018). Principal job performance pertains to the demonstration of effective leadership behaviours and competencies by school principals in fulfilling their administrative roles and responsibilities. Certain jobs and functions carried out by principals in this present day may encompass activities such as policy implementation, instructional leadership



roles, setting strategic directions, creating a positive school culture, promoting teacher professional development, engaging stakeholders, managing resources, financial management and ensuring accountability for student outcomes. Akpakwu (2012) opined that principals being the chief custodian of instructional leadership and general administration, performs several jobs or responsibilities which includes administrative functions, financial functions, staff personnel functions, student functions, school facilities functions and schoolcommunity functions in order to achieve educational goals and objectives (Akpakwu, 2012).

In recent years, the landscape of educational administration has witnessed a paradigm shift propelled by the integration of digital technologies. Principals, as the pivotal leaders within the educational ecosystem, are increasingly turning towards digitalized tools to enhance their job performance and administrative efficacy. This study delved into the multifaceted exploration of principals' utilization of digitalized tools, specifically focusing on social networking tools, Artificial Intelligence (AI) tools, and Microsoft Office Software tools, within secondary schools in Anambra State. Principals' utilization of social networking tools for their job performance in secondary schools in Anambra State has emerged as a critical dimension in contemporary educational leadership. Social networking platforms offer avenues for communication, collaboration, and professional development among educators. Social networking tools include social media apps such as WhatsApp, Google calendar, Zoom, Facebook, Task scheduling machines, LinkedIn, YouTube, Instagram, Skype and Twitter. Other social networking tools are Internet browsers like Firefox, Safari, and Chrome, Mobile pieces of software such as Pandora (for music appreciation) (Bolkan, 2017). These social networking tools can be used by principals for school promotion and branding, staff training and development, parents and community engagements, crises and emergency communication, among others. In citing instances, principals can create a YouTube channel for their school to showcase its unique programmes, facilities, and achievements. They can upload videos highlighting student projects, extracurricular activities, sports events, and academic accomplishments, thus enhancing the school's visibility and reputation.

Principals can create virtual tours of the school and facilities, allowing prospective students and parents to explore the school environment from the comfort of their homes. This can be particularly useful for recruitment purposes and attracting new students to the school. Principals can further use task scheduling machines to create and maintain a detailed schedule of their daily tasks and responsibilities. This includes administrative duties, meetings with staff or parents, classroom observations, and other essential activities. WhatsApp provides principals with a quick and efficient means of communication with staff members, allowing for instant updates, announcements, and coordination of activities. Social networking platforms like LinkedIn offer secondary school principals the opportunity to connect with other educational leaders, share insights, and engage in discussions related to best practices in school management and leadership (Bolkan, 2017). Principals' engagement with platforms such as LinkedIn, Twitter, and educational forums facilitates networking opportunities, knowledge exchange, and access to resources is pertinent to school management. Additionally, principals should stay informed about emerging trends and best practices in using social media for educational leadership to maximize its impact on their job performance (Jackson, 2019). The study however, sought to delve into principals in Anambra State harness and utilize social networking tools to augment their administrative capacities.

The integration of Artificial Intelligence (AI) tools into educational administration heralds a new era of efficiency and innovation. Artificial Intelligence (AI) tools such as ChatGPT, student performance analytics, predictive analytics for dropout prevention, administrative automation, virtual assistants, personalized learning platforms, AI-powered communication platforms for parent and community engagement, and smart campus solutions, are necessary for principals' administrative job performance. Integrating artificial intelligence (AI) tools into their workflow can greatly enhance a principal's job performance in a school setting. Principals' utilization of AI-driven systems for tasks such as data analysis, student performance tracking, and personalized learning interventions can significantly enhance decision-making processes and resource allocation (Van den Akker, Gravemeijer, McKenney & Nieveen, 2020). AI-powered analytics tools can further analyze student performance data, identify trends, and provide insights to help principals understand academic strengths and weaknesses. This information can inform instructional strategies, interventions, and resource allocation to



support student success. AI-driven adaptive learning platforms can personalize instruction for individual students based on their learning styles, preferences, and abilities.

Principals can implement these tools to support differentiated instruction and provide tailored learning experiences that meet the diverse needs of students. AI algorithms can analyze various factors, such as attendance records, grades, and behavioural patterns, to predict which students are at risk of dropping out. Principals can use this information to intervene early, provide targeted support, and implement intervention strategies to prevent dropout. AI-powered automation tools can streamline administrative tasks such as scheduling, data entry, and report generation. By automating routine tasks, principals can free up time to focus on strategic planning, instructional leadership, and building relationships within the school community. Overall integrating AI tools into their job performance can empower principals to make informed decisions, personalize learning experiences, support student success, and drive continuous improvement in schools Van den Akker et al (2020). By leveraging AI tools like chatbots for administrative tasks or predictive analytics for academic forecasting, principals in Anambra State can streamline operations and optimize educational outcomes. This study aimed to explore the current landscape of AI utilization among secondary school principals in the State. Microsoft Office Software tools stand as ubiquitous resources in the arsenal of educational administrators worldwide. Microsoft Office software would include the use of Excel, Word, PowerPoint, Outlook, Microsoft Forms, Microsoft Teams, Microsoft OneNote. Smith (2018) indicated that principals can leverage these Microsoft Office software tools to enhance their job performance and streamline administrative tasks in a school setting in different ways and manner. They can use Microsoft Word for documentation and reporting in order to create and edit various documents, including reports, memos, policies, and procedures. Microsoft Word can be used to design and format newsletters, bulletins, and other communication materials for distribution to staff, parents, and stakeholders. Principals can create and maintain policy manuals using Word, ensuring that all school policies and procedures are documented and easily accessible. They can use Excel or Spread Sheet to organize and analyze data related to students performance, attendance, budgeting, and resource allocation.

Excel equally can be used to create and manage budgets, track expenses, and forecast financial trends to ensure efficient use of resources. Principals can use PowerPoint to create engaging presentations for staff meetings, parent meetings, professional development sessions, and other school events. PowerPoint slides can also be used to promote school events, achievements, and initiatives during assemblies, open houses, and community meetings (Cox, 2021). Microsoft Outlook can be used to manage email communication, schedule meetings, and organize tasks and appointments. Principals can use Outlook's calendar feature to schedule and coordinate meetings, events, and appointments with staff, parents, and stakeholders. OneNote can be used for collaborative note-taking and brainstorming sessions with staff members, allowing for real-time collaboration and sharing of ideas. Principals can use Microsoft Teams to facilitate communication and collaboration among staff members through chat, video calls, and file sharing. Teams can be used to host virtual team meetings, allowing staff members to connect and collaborate regardless of their location.

Principals can use Forms to create surveys and collect feedback from staff, students, parents, and stakeholders on various school-related matters. Forms can also be used to create registration forms for school events, workshops, and professional development sessions. Overall, principals can leverage and utilize Microsoft applications like Word, Excel, PowerPoint, Teams, among others, for diverse purposes ranging from documentation and reporting to communication and collaboration (Smith, 2018). By effectively utilizing these Microsoft Office software tools, principals can streamline administrative tasks, improve communication and collaboration, and enhance overall efficiency and productivity in a school setting. The proficient utilization of these tools not only enhances organizational efficiency but also fosters innovative instructional practices and stakeholder engagement (Cox, 2021). This study hence, endeavours to examine how principals in secondary schools in Anambra State harness Microsoft Office Software tools to optimize their job performance and administrative functions. By dissecting principals' utilization of social networking tools, AI tools, and Microsoft Office Software tools, the study aimed to offer insights into the evolving landscape of digitalized leadership practices within secondary schools in Anambra State.



Understanding the current dynamics associated with the adoption of these digitalized technologies is equally crucial for fostering informed policies and interventions geared towards maximizing educational leadership efficacy in the digital age. However, a look at the secondary schools' administration in Anambra State, it is as if principals' are not fully grounded in the use of digitalized tools. This can be found rather within their administrative inefficiencies and lapses in executing their functions and responsibilities. Many of the principals still rely heavily on the old and traditional method of school governance without application of digitalized tools. On the contrary, school leaders such as principals are expected in today's 21st century must strive to fill any gaps in their technological knowledge and skills in order to provide direction and guidance to lead digital development in their schools and spread this practice to the school learning environment (Aksal, 2015). Principals' utilization of digital tools is important to attract students' interest and improve their performance, as well as, support the teachers to achieve their instructional objectives in teaching a subject (Sallehin, Halim, Education, Tun& Onn, 2015). Petersen (2014) has noted that when school administrators have taken the initiative to learn about the use of technology on their own accord; they would plan teacher training programmes using technology and carry out school management and school leadership tasks using digital technology devices. Principals' efficient management of the education system through effective utilization of digitalized tools would help to have an effective impact on teachers' teaching practices and digital learning systems (Bernhardt, 2015). Therefore, the difficulties encountered by most principals in executing their administrative responsibilities and task in secondary schools in Anambra State, which seem to be worrisome, has motivated the researcher to conduct this study. Although, past empirical studies such as those of Adams and Fati (2020), Hamzah, Nasir and Wahab (2021), Ihuoma (2016), Nwafor, Ejoh, Chukwurah and Okeke (2023), Onuorah and Chukwu (2022) and Seyal (2014) have been conducted in areas of digitalized tools and information communication technologies, but these studies have their own mix, findings and shortcomings which necessitates the present study. Most of these past empirical studies focused on the importance of digital technologies in schools and challenges in utilization of most ICT or digital technologies. It is therefore, upon this premise that the present study sought to examine principals' utilization of digitalized tools for their job performance in secondary schools in Anambra State.

Statement of the Problem

In the dynamic landscape of educational leadership, the utilization of digitalized tools by principals within secondary schools in Anambra State seems to present both opportunities and challenges. Despite the potential benefits of integrating digitalized technologies into principals' administrative practices, there remains a gap in understanding how principals harness these tools to enhance their job performance. Therefore, the central problem to be addressed in this study is: How do principals in secondary schools in Anambra State utilize these digitalized tools, including social networking tools, Artificial Intelligence (AI) tools, and Microsoft Office Software tools, for their job performance? This study aimed to delve into the specific dimensions of principals' engagement with digital technologies, as well as, exploring the levels of their utilization. By addressing this problem, the study sought to offer insights and solutions that can inform strategies and interventions aimed at maximizing the potential of digitalized leadership practices in Anambra State secondary schools.

Purpose of the Study

The aim of this study was to examine principals' utilization of digital tools for job performance in secondary schools in Anambra State. Specific objectives of this study ascertained:

1. Principals' utilization of social networking tools for job performance in secondary schools in Anambra State
2. Principals' utilization of Artificial Intelligence (AI) tools for job performance in secondary schools in Anambra State



3. Principals' utilization of Microsoft Office Software tools for job performance in secondary schools in Anambra State.

Research Questions

The following research questions guided the study.

1. How do principals utilize social networking tools for job performance in secondary schools in Anambra State?
2. How do principals utilize Artificial Intelligence (AI) tools for job performance in secondary schools in Anambra State?
3. How do principals utilize Microsoft Office Software tools for job performance in secondary schools in Anambra State?

Method

A descriptive survey design was employed in the study. This design was used to collect data from a sample of public secondary school principals in Anambra State from their large population using the questionnaire in order to showcase their opinions as regards to the present study. Population for the study comprised 259 principals from all the public secondary schools in the 6 education zones in Anambra State. Justification for choosing only principals was to enable the researcher to get the necessary information pertaining to the study. Moreover, the principals were in a better position to describe their utilization of digitalized computer tools for their job performance. Sample size of the study constituted of 207 (80 percent) principals from 207 public secondary schools in the 6 education zones selected using the stratified random sampling technique. Justification for selecting 80% of the principals of public secondary schools as sample, was as a means to enable the researcher to have a wider sample size of the principals' population in Anambra State. The choice of sampling selection is also in line with the recommendation of Nworgu (2015) who identified that 5% to 80% of any given population is adequate for any research work. A 29-item researcher-developed questionnaire structured on a 4-point scale of Highly Utilized (HU), Utilized (U), Less Utilized (LU) and Not Utilized (NU) was used for data collection. The instrument was titled "Principals' Utilization of Digitalized Tools for their Job Performance Questionnaire (PUDTJPQ)". Construction of the questionnaire was guided by the literature reviewed, purpose of the study and research questions. The PUDTJPQ was face validated by three experts; two of these experts were from the Department of Educational Management and Policy, and one Measurement and Evaluation expert from the Department of Educational Foundations, Faculty of Education, Nnamdi Azikiwe University, Awka. These experts determined the face and content validity of the research instrument. They equally made useful corrections on some of the items in the questionnaire which was incorporated before the final print out of the questionnaire. Reliability of the research instrument was established through a pilot-test carried out once on a single administration sampling 20 principals in some selected 20 public secondary schools in Enugu State. Data collated after the pilot test were measured using Cronbach Alpha statistics which gave internal consistency reliability values of 0.80, 0.84 and 0.83 for the three clusters which were added up and divided to give an overall reliability coefficient r-value of 0.82 showcasing that the questionnaire was reliable, dependable and trustworthy of collecting the necessary data from the respondents.

The PUDTJPQ was distributed to the respondents (principals) by the researchers with the help of six research assistants who were residence from the six education zones where the sampled public secondary schools were located in Anambra State. An on-the-spot method was adopted by the researcher and the research assistants to distribute copies of the questionnaire to ensure maximum recovery of the questionnaire administered. These research assistants were equally briefed about the intention of the study likewise on how to meet with the principals in order to collect the necessary data for the study. At first, the research assistants consulted the principals before distributing the questionnaire to them in their schools. A total of 207 copies of questionnaires



were printed and distributed to the respondents (principals). All the copies of the questionnaire distributed to the respondents were recovered back by the researcher and research assistants within a period of five working days at a return rate of 100%. Data collated were analyzed using mean scores rated at 2.50 and standard deviation statistics. The decision rule for interpreting the scores on each statement on the questionnaire was based on the mean scale, which was benchmarked on 2.50 rating. Only mean scores of the respondents' statements which rated 2.50 and above were regarded as an indication of Utilized (U). While mean scores of the respondents' statements which rated below 2.50 were regarded as an indication of Not Utilized (NU).

Results

Research Question One: How do principals utilize social networking tools for their job performance in secondary schools in Anambra State?

Table 1: Mean Scores and SD Ratings of Principals on their Utilization of Social Networking Tools for their Job Performance in Secondary Schools in Anambra State

N = 207 Principals

S/N	Please share your opinion concerning your utilization of the following under listed social networking tools for your job performance. Your ability to use:	HU	U	LU	NU	Mean	SD	Decision
1.	WhatsApp to form group platforms to organize virtual meeting likewise efficiently communicate with staff	55	78	39	35	2.74	1.03	Utilized
2.	Google calendar to schedule likewise send reminders to staff concerning their meetings including other school events	38	43	70	56	2.30	1.06	Not Utilized
3.	Zoom to participate in discussions, attend webinars, and access resources aimed at enhancing leadership skills and job performance	21	30	76	80	1.96	0.97	Not Utilized
4.	Facebook create an official page for the school, where updates, announcements, photos, and videos about school events, achievements, and initiatives can be shared	49	32	67	59	2.34	1.13	Not Utilized
5.	Task scheduling machines to create, maintain a detailed schedule of daily administrative duties, tasks and responsibilities with staff or parents, classroom observations, and other essential activities	20	29	100	58	2.05	0.90	Not Utilized
6.	YouTube create, upload useful videos that in order to engage with parents, students, teachers including other stakeholders in the school community	17	40	87	63	2.05	0.91	Not Utilized
7.	Skype for creating group to conduct meetings likewise discuss important matters with staff	34	27	81	65	2.14	1.04	Not Utilized
8.	Instagram to post important information to staff likewise, provide avenues to share articles, resources, and success stories related to effective school leadership	10	38	57	102	1.79	0.91	Not Utilized
9.	Internet browsers like Firefox, Safari, and Chrome to search and retrieve important online information that will improve school administration	42	23	78	64	2.21	1.09	Not Utilized
10.	LinkedIn to connect with other educational leaders, share insights, likewise engage in discussions related to best practices in school management and leadership	18	30	99	60	2.03	0.88	Not Utilized
11.	Twitter to share updates about school events, achievements, and initiatives, likewise respond to inquiries or feedback in real-time	36	40	80	51	2.29	1.02	Not Utilized
Overall Mean Score & SD =						2.17	1.03	Not Utilized



Analysis of data from Table 1 indicated that only item 1 was rated above 2.50 of the criterion mean score to show the respondents (principals) agreement with these statements. All the other items from 2 to 11 were rated below 2.50 of the criterion mean score to show the respondents (principals) disagreement with these statements. Their overall mean score and SD is 2.17 and 1.30 respectively, indicating closeness in their responses. However, this result indicated that apart from WhatsApp which was being utilized; the principals do not utilize all the other social networking tools for their job performance in secondary schools in Anambra State.

Research Question Two: How do principals utilize Artificial Intelligence (AI) tools for their job performance in secondary schools in Anambra State?

Table 2: Mean Scores and SD Ratings of Principals on their Utilization of Artificial Intelligence (AI) Tools for their Job Performance in Secondary Schools in Anambra State

N = 207 Principals

S/ N	Please share your opinion concerning your utilization of the following under listed Artificial Intelligence (AI) tools for your job performance. Your ability to use:	HU	U	LU	NU	X	SD	Decision
12.	AI-powered analytics tools to analyze student performance data, identify trends, and provide insights to help understand students' academic strengths and weaknesses	10	8	82	97	1.7	0.8	Not Utilized
13.	AI-driven adaptive learning platforms to meet diverse needs of students through personalized instructions for individual students based on their learning styles, preferences, and abilities	12	2	98	75	1.8	0.8	Not Utilized
14.	AI algorithms to analyze various factors, such as attendance records, grades, and behavioural patterns, in order to predict and prevent students from dropping out of school	9	1	3	90	1.6	0.7	Not Utilized
15.	AI-powered automation tools to streamline administrative tasks such as scheduling, data entry, and report generation	15	1	6	68	1.7	0.8	Not Utilized
16.	AI chatbots through messaging platforms in order to improve communication and engagement with parents about school policies, events, or students' progress	11	1	4	85	1.7	0.8	Not Utilized
17.	AI-powered learning platforms to deliver personalized professional development opportunities for teachers based on their individual needs, interests, and goals which enhances instructional practices likewise improve students' learning outcomes	13	1	8	75	1.7	0.8	Not Utilized
18.	AI-powered counselling and support tools to provide students with access to resources, guidance, and support for social-emotional learning, mental health, and academic counselling which enable students receive the assistance they need to thrive academically and emotionally	16	2	8	70	1.8	0.9	Not Utilized
19.	AI-powered surveillance systems which aids in detecting potential threats, monitoring school activities, and identifying unusual behaviours or patterns in order to enhance school safety and security likewise to create safer learning environments and respond quickly to		1			1.7	0.7	Not Utilized



	emergencies concerns	8	9	96	84	6	7	Utilized
20.	AI-driven insights to implement innovative solutions, monitor progress, including drive ongoing improvement efforts within the school community	1						
		1.7	0.8	Not	11	7	77	102
					0	3		Utilized
21.	AI tool to make data-driven decisions about resource allocation and budgeting to support students learning and school improvement initiatives							
				1			1.6	0.7
		6	6	80	105	3	5	Not Utilized
Overall Mean Score & SD =							1.7	0.8
							3	3
								Not Utilized

Analysis of data from Table 2 indicated that none of the items was rated above 2.50 of the criterion mean score to show the respondents (principals) agreement with these statements. All the items from 12 to 21 were rated below 2.50 of the criterion mean score to show the respondents (principals) disagreement with these statements. Their overall mean score and SD is 1.73 and 0.83 respectively, indicating closeness in their responses. However, this result indicated that principals did not utilize the Artificial Intelligence (AI) tools for their job performance in secondary schools in Anambra State.

Research Question Three: How do principals utilize Microsoft Office Software tools for their job performance in secondary schools in Anambra State?

Table 3: Mean Scores and SD Ratings of Principals on their Utilization of Microsoft Office Software Tools for their Job Performance in Secondary Schools in Anambra State

N = 207 Principals

S/ N	Please share your opinion concerning your utilization of the following under listed Microsoft Office Software tools for your job performance. Your ability to use:	HU	U	LU	NU	Me	SD	Decision		
22.	Microsoft word to create, save, record likewise edit various documents, including reports, memos, policies, and procedures in school	2.7	1.0	59	73	35	40	3	7	Utilized
23.	Microsoft word to design and format school newsletters, bulletins, and other communication materials for distribution to staff, parents, likewise other stakeholders			85	68	22	32	3.0	1.0	Utilized
24.	Excel to record, organize and analyze data related to student performance, attendance, financial inventories, budgeting, including resource allocation in school	2.6	1.1	63	60	30	54	4	7	Utilized
25.	PowerPoint to create engaging presentations for staff meetings, parent meetings, professional development sessions, likewise other school events	1.9	0.9	20	31	74	82	5	6	Not Utilized
26.	Microsoft Outlook to manage email communication, and organize tasks and appointments	2.1	0.9	28	27	91	61	1	8	Utilized
27.	Microsoft OneNote for collaborative note-taking including taking and organizing notes during meetings, professional development sessions, likewise conferences	2.0	1.0	25	39	68	75	7	1	Utilized
28.	Microsoft forms to create registration forms for school events, workshops, likewise professional development sessions	1.8	0.9	18	24	82	83	9	2	Utilized



29. Microsoft forms to also create surveys and collect feedback from staff, students, parents, including other stakeholders on various school-related matters 2.1 1.0 Not

Overall Mean Score & SD =

29	43	71	64	8	2	Utilized
				2.3	1.1	Not
				2	0	Utilized

Analysis of data from Table 3 indicated that only items 22 to 24 were rated above 2.50 of the criterion mean score to show the respondents (principals) agreement with these statements. All the other items from 25 to 29 were rated below 2.50 of the criterion mean score to show the respondents (principals) disagreement with these statements. Their overall mean score and SD is 2.32 and 1.10 respectively, indicating closeness in their responses. However, this result indicated that apart from the Microsoft word and Excel, the principals did not utilize other Microsoft Office Software tools for their job performance in secondary schools in Anambra State.

Discussion of Findings

Findings of the study revealed that the principals did not utilize many of the digitalized tools for their job performance in secondary schools in Anambra State. They did not utilize the social networking, Artificial Intelligence (AI) and Microsoft Office Software tools for their job performance in secondary schools in Anambra State. The finding of this study indicated that apart from WhatsApp which was being utilized; the principals did not utilize all the other social networking tools for their job performance in secondary schools in Anambra State. Other social networking digitalized tools such as the Google calendar to schedule likewise send reminders to staff concerning their meetings including other school events, Zoom to participate in discussions, attend webinars, and access resources, Facebook to create an official page for the school, where updates, announcements, photos, and videos about school events, achievements, and initiatives can be shared, Task scheduling machines to create, maintain a detailed schedule of daily administrative duties, tasks and responsibilities with staff or parents, classroom observations, and other essential activities, YouTube to create, upload useful videos that in order to engage with parents, students, teachers including other stakeholders in the school community, Skype for creating group to conduct meetings likewise discuss important matters with staff, Instagram to post important information to staff likewise, provide avenues to share articles, resources, and success stories related to effective school leadership, Internet browsers like Firefox, Safari, and Chrome to search and retrieve important online information that will improve school administration, LinkedIn to connect with other educational leaders, share insights, likewise engage in discussions related to best practices in school management and leadership, and Twitter to share updates about school events, achievements, and initiatives, likewise respond to inquiries or feedback in real-time; were not utilized by the principals for their job performance in secondary schools in Anambra State. This finding is in consonance with the findings of Nwafor, Ejoh, Chukwurah and Okeke (2023) study which indicated that teachers' competence in the utilization of digitalized learning tools such as zoom facilities, google classrooms, and video clips was very low. The present study finding also corroborates with the findings of Adams and Fati (2020) study which indicated among others that computer teachers in secondary school do not utilize computer hardware and internet applications in their lessons. Also, the teachers lacked the required skills to operate these ICT resources, secondary schools lacked the necessary infrastructures required for utilization of the ICT resources and applications. From the present study finding, principals inability to utilized the social networking tools would have negative impact on school administration especial at this period of digital technologies.

It was found out that principals did not utilize the Artificial Intelligence (AI) tools for their job performance in secondary schools in Anambra State. Artificial Intelligence (AI) tools such as: AI-powered analytics tools to analyze student performance data, identify trends, and provide insights to help understand students' academic strengths and weaknesses, AI-driven adaptive learning platforms to meet diverse needs of students through personalized instructions for individual students based on their learning styles, preferences, and abilities, AI



algorithms to analyze various factors, such as attendance records, grades, and behavioural patterns, in order to predict and prevent students from dropping out of school, AI-powered automation tools to streamline administrative tasks such as scheduling, data entry, and report generation, AI chatbots through messaging platforms in order to improve communication and engagement with parents about school policies, events, or students' progress, AI-powered learning platforms to deliver personalized professional development opportunities for teachers based on their individual needs, interests, and goals which enhances instructional practices likewise improve students' learning outcomes, AI-powered counselling and support tools to provide students with access to resources, guidance, and support for social-emotional learning, mental health, and academic counselling which enable students receive the assistance they need to thrive academically and emotionally, AI-powered surveillance systems which aids in detecting potential threats, monitoring school activities, and identifying unusual behaviours or patterns in order to enhance school safety and security likewise to create safer learning environments and respond quickly to emergencies concerns, AI-driven insights to implement innovative solutions, monitor progress, including drive ongoing improvement efforts within the school community, and AI tool to make data-driven decisions about resource allocation and budgeting to support students learning and school improvement initiatives; were not utilized by the principals for their job performance in secondary schools in Anambra State. This finding deviates and does not correspond with the findings of Hamzah, Nasir and Wahab (2021) study which discovered that the level of digital leadership displayed by principals and teachers' digital teaching practice were both at a high level. However, the present study finding corroborates with Onuorah and Chukwu (2022) study which found out that principals utilized Information and Communication Technology (ICT) features and application in school management to a low extent. Also, the present study finding is not in agreement with findings of this previous study in the aspect that principals' utilization of Information and Communication Technology (ICT) internet based services for effective secondary school management was to a high extent. The finding of this study is consistent with the findings of Seyal (2014), who made similar findings indicating that although the school administrators were aware of the importance of ICT applications in school administration, hut the major challenge is the lack of the required skill and knowledge to use these applications. This previous study went further to highlight that majority of the schools lacked the required ICT applications hence very few principals could use them for administrative purposes. Whereby principals did not utilize the Artificial Intelligence (AI) digitalized tools, they would lack the necessary skills that will enable them manage their responsibilities in schools. And this situation, would also hamper their administrative efficiencies and practices especially in this technological age.

Finally, the finding of this study indicated that apart from the Microsoft word and Excel, the principals did not utilize other Microsoft Office Software tools for their job performance in secondary schools in Anambra State. Other Microsoft Office Software tools such as: PowerPoint to create engaging presentations for staff meetings, parent meetings, professional development sessions, likewise other school events, Microsoft Outlook to manage email communication, schedule meetings, and organize tasks and appointments, Microsoft OneNote for collaborative note-taking including taking and organizing notes during meetings, professional development sessions, likewise conferences, Microsoft forms to create registration forms for school events, workshops, likewise professional development sessions, and Microsoft forms to also create surveys and collect feedback from staff, students, parents, including other stakeholders on various school-related matters; were not utilized by the principals for their job performance in secondary schools in Anambra State. This finding is in line with Ihuoma (2016) study which found out that majority of the principals never used ICT features and applications such as audio visual and communication applications for administrative purposes due to that they were not computer literate. The present study finding corroborates with Adams and Fati (2020) study which indicated among others that computer teachers in secondary school do not utilize computer hardware and internet applications in their lessons. Also, the teachers lacked the required skills to operate these ICT resources, secondary schools lacked the necessary infrastructures required for utilization of the ICT resources and applications. However, just like the teachers, if the principals do not efficiently utilize the Microsoft Office Software digitalized tools, this would have negative impact on their job performance in governing their schools effectively. Essentially, all the findings of this present study have clearly shown that there are a lot of deficiencies to efficient management of schools in this technological era especially in Anambra State, therefore, demanding the need for principals' exposure to constant utilization of digitalized tools for their job performance. These



findings showed that principals did not utilize social networking platforms for professional networking, collaboration, and knowledge exchange, including harnessing AI tools for tasks such as data analysis, student performance tracking, and decision-making. Additionally, Microsoft Office Software tools which played a crucial role in documentation, communication, and collaboration within school administration was equally not effectively utilized by the principals. These situation calls for absolute redressing and priority concern by all education stakeholders to improve principals' utilization of digitalized tools for their job performance in secondary schools in Anambra State.

Conclusion

This study has proven that the ability to plan and organize digital leadership programmes is important and can help to improve the general administration of schools. However, the exploration of principals' utilization of digitalized tools for their job performance in secondary schools in Anambra State revealed a dynamic landscape shaped by the integration of technology into educational leadership practices. Through the examination of social networking tools, Artificial Intelligence (AI) tools, and Microsoft Office Software tools, it became evident that principals in Anambra State secondary schools did not utilize these digitalized technologies to enhance their administrative capacities and optimize organizational efficiency. Moving forward, it is imperative for educational stakeholders, policymakers, and school leaders to recognize the transformative potentials of digitalized tools in school administration/management and invest in initiatives that empower principals to effectively harness these digitalized technologies for improved job performance and enhanced educational outcomes in Anambra State secondary schools. By embracing digital innovation and fostering a culture of continuous learning and adaptation, principals can position themselves as visionary leaders capable of navigating the complexities of the digital age and driving positive change within their school communities. In essence, the effective utilization of digitalized tools by principals represents not only a means to enhance administrative efficiency but also a pathway towards promoting transformative leadership practices that empower educators, engage stakeholders, and ultimately, enrich the educational experiences and outcomes of students in Anambra State secondary schools.

Recommendations

From the findings of this study, the following recommendations were proffered:

1. Anambra State Government in collaboration with educational authorities and institutions such as the Post Primary Schools Service Commission (PPSSC) should prioritize investment in professional development programmes tailored to equip principals with the necessary digital literacy skills and competencies. These programmes should focus on enhancing principals' proficiency towards utilization of social networking tools, Artificial Intelligence (AI) tools and Microsoft Office Software tools effectively for their job performance in executing all their administrative tasks, duties and decisionmaking in school.
2. Post Primary Schools Service Commission (PPSSC) should encourages principals to foster collaborative learning communities and social professional networks where principals can share best practices, exchange ideas, and collaborate on innovative uses of social networking digitalized tools. Social networking platforms such as online forums like WhatsApp, Zoom, YouTube, Skype, LinkedIn, Instagram, Twitter, including communities of practice, and collaborative learning networks can provide valuable support and resources for principals seeking to enhance their digital leadership skills.
3. There is need for adequate digitalized infrastructural support which is essential to ensure equitable access to and utilization of Artificial Intelligence (AI) digitalized tools among principals in Anambra State secondary schools. Authorities and regulatory body like the State Government and Post Primary Schools Service Commission (PPSSC) should allocate resources towards improving internet connectivity, providing access to devices likewise constant Information Technology (IT) training, and implementing robust IT infrastructure



within schools to facilitate seamless integration and utilization of Artificial Intelligence (AI) tool in order to aid principals job performance in secondary schools.

4. Principals with encouragements from PPSSC should foster partnerships and collaboration with relevant stakeholders, including technology providers, educational researchers, financial institutions and government agencies, to support the adoption and effective utilization of Microsoft Office Software digitalized tools like Microsoft Word, Excel, PowerPoint, Microsoft Outlook, Microsoft OneNote, and Microsoft forms, for principals improved job performance in secondary schools. Collaborative initiatives therefore, can leverage expertise, adequate resource mobilization, and networks to address common challenges, drive innovation, and amplify the impact of digital leadership initiatives in Anambra State secondary schools.

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