

## ENHANCING ADMINISTRATIVE EFFECTIVENESS IN SENIOR SECONDARY SCHOOLS IN ABUJA, NIGERIA: THE NEED FOR THE AWARENESS AND UTILISATION OF ARTIFICIAL INTELLIGENCE

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### Abstract

This study examined the level of awareness and utilisation of artificial intelligence as correlates of administrative effectiveness in senior schools in Abuja, Nigeria. The study adopted the descriptive research design of the correlational type. Among the public senior secondary schools, 40 were randomly selected in all the six-area councils in Abuja, Nigeria. Purposive sampling technique was used to select one principal from each school making a total of 40 principals and systematic sampling method was used to choose two vice principals from each. This makes 80 vice principals available for the study. In all, a total number of 120 respondents participated in the study. Two research instruments were used for data collection. They were: Principals' Awareness of Artificial Intelligence Questionnaire ( $r=0.76$ ), and Questionnaire on Principals' Use of Artificial Intelligence ( $r=0.78$ ). Data collection for the study lasted three weeks and were analysed using descriptive statistics of mean and inferential statistics of Pearson product moment correlation coefficient. Findings of the study revealed that the level of principals' awareness of artificial intelligence for administrative effectiveness in public senior secondary schools was high. It also revealed that the extent to which principals utilised artificial intelligence for administrative effectiveness in public senior schools was low. Also, the result revealed that there was a positive strong relationship between awareness and utilisation of Artificial Intelligence and administrative effectiveness in public senior schools ( $r = .626$ ;  $p=.001<.05$ ). Based on the findings, it is recommended among others that government and educational authorities should invest in reliable internet connectivity, electricity, and other digital infrastructure that will support the effective utilisation of AI tools in secondary schools and clear institutional policies should be developed to guide AI adoption in school administration, addressing issues of data privacy, ethical use, and sustainability.

**Keywords:** Principals' Awareness, Utilisation, Artificial Intelligence, Administration, Effectiveness

### Introduction

Administration is the task of overseeing an organisation with the optimum use of all the available resources (human and nonhuman) for achieving the stated goals and objectives. It involves processes such as; planning, organising, directing, coordinating, controlling and evaluating performance (Akinwumi, Yemisi & Alegbeleye, 2021). Ogunode and Abashi, (2020) see administration in education as dealing with systematic organisation, arrangement, integration, evaluation and co-ordination of both materials and human resources in an effective and efficient ways to realize the general educational objectives. Ogunode (2020a) stated that educational administration is the application of educational resources to achieve educational goals. Educational administration is the act and process of using resources in an effective and efficiency ways to attain the various objectives of educational institutions. Educational

administration deals with the planning and organizing human and materials resources to realize the goals of educational institutions. Educational administration is the systematic arrangement of educational input in an operational means to achieve the set goals of educational institution. Nwiyi (2018) viewed educational administration as concerned with integrating the appropriate human and material resources that are made available and made effective for achieving the purposes of a program of an educational institution. Gift (2018) is of the opinion that the features of Educational Administration include the following: (1). Educational administration doesn't refer to any single process rather different processes or aspects constitute administration. These are planning, organizing, directing, coordinating, controlling, staffing and evaluation. (2). Educational administration is a non-profit making task. (3). Educational administration is primarily a social enterprise as it is more concerned with human resources than with material resources. (4). Educational administration is more of an art than a science. The reason is that human relationship prevailed here can't be maintained by any set of formulae. (5). Educational administration is similar to general administration in many ways, but it is also dissimilar to general administration in many more ways. (6). Educational administration is a complex affair.

Meanwhile, the global integration of Artificial Intelligence (AI) into educational systems is rapidly transforming school administration and instructional processes. In senior secondary schools, where administrators are required to handle large volumes of information, make strategic decisions, manage resources, and supervise academic activities, the adoption of AI has the potential to significantly improve administrative effectiveness. However, the degree to which these benefits are realized depends largely on school administrators' and educators' awareness of AI tools and their utilisation of such technologies. In Nigeria, Abuja, the capital city and educational nerve centre of the country, senior schools are experiencing increasing pressure to improve their performance, accountability, and service delivery. This makes the issue of AI integration into school management timely and necessary. This discussion explores the interrelationships between awareness, utilisation of AI, and administrative effectiveness in senior secondary schools, while situating the discourse within the Nigerian educational context. Artificial Intelligence refers to computer systems designed to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, understanding natural language, and perception (Russell & Norvig, 2020). In the educational context, AI manifests in various forms such as:

- i. Automated student performance tracking and data analytics,
- ii. Virtual assistants (e.g., chatbots for communication),
- iii. Predictive analytics for decision-making,
- iv. Intelligent tutoring systems, and
- v. Automated scheduling and resource allocation.

AI tools are particularly effective in enhancing administrative tasks including student record management, financial accounting, facility maintenance, communication, human resource management, and decision-making support.

Hence, the major objective of school administration is to ensure that the various educational institutions are implemented as planned. School administration ensures that all teaching and non-teaching staff are well supervised to do their works effectively. School administration covers the following; school planning, organising, controlling, coordinating and evaluating performance, decision making, curriculum development and planning, school plant management, students' activities, teachers' programme, human capacity development, school-

community relationship, academic calendar planning, extra-curriculum programme, school discipline programme, school sport, school examination and school security. School administration involves practical organization and arrangement of school work schedules in effective ways using administrative structures to implement school programme and realize the school objectives whereby posts are created and assigned for the optimal performance of the school.

AI is an advanced computer-controlled system with likely human Intelligence. Artificial Intelligence is being used in educational management to enhance the learning process, improve student outcomes, and streamline administrative tasks. Administration of school is saddled with the responsibility of ensuring stable academic calendar and implementation of programmes as planned. Administrators are to ensure full supervision and implementation of teaching programme. Administrators are saddled with responsibilities of planning school tables table, teacher's schedules and school calendar. AFSA (2022) observed that AI can automate routine administrative tasks, such as managing student records, generating reports, scheduling and handling routine inquiries. By automating these processes, administrators can save time and allocate their efforts to more strategic and value-added tasks. AI can be used to improve the efficiency of administrative tasks in educational institutions. AI-powered systems can automate routine tasks, such as grading, scheduling, and record-keeping, freeing up educators' time to focus on more impactful work, such as lesson planning and student engagement (Oztok and Zingaro, 2019). Educational institutions have to deal with a lot of administrative tasks, such as scheduling, grading, and record-keeping. AI can automate many of these tasks, freeing up educators' time to focus on teaching and supporting students.

Artificial Intelligence refers to the development of computer systems capable of performing tasks that typically require human intelligence (AFSA 2022). These tasks include learning, reasoning, problem solving, perception and natural language understanding. Artificial Intelligence technologies encompass various techniques and approaches, such as machine learning, deep learning, natural language processing, computer vision and robotics. These technologies enable computers to analyze vast amounts of data, recognise patterns, make predictions and automate complex processes. Artificial Intelligence has applications across numerous fields, including health care, finance, transportation, customer service and education. It has the potential to transform industries, improve efficiency and create new opportunities (AFSA 2022). Ogunode (2023) defined AI as programs designed with human-like intelligence and structured in forms of computer, robot, or other machines to aid in provision of any kind of service or tasks to improve social economic and political development of the society. Artificial Intelligence is an application or program constructed to carry out tasks with human like intelligence. Ogunode also viewed Artificial Intelligence as collections system, packages and application designed into digital computer or computer-controlled robot to carry out assignments and tasks with human-like intelligence.

Deployment of Artificial Intelligence in educational administration can lead to effective data analysis and decision making, effective school administrative, resource optimisation, student support and intervention, streamlined communication and engagement and enhanced security and safety. There are many factors that hinder the full utilisation of Artificial Intelligence in Nigerian Secondary Schools. Some of these factors are limited supply of AI equipment to schools, underutilisation of AI resources where they are available. Underutilisation is born out of a number of barriers; lack of support personnel, intermittent internet condition, absence of AI-related projects, lack of training programmes in AI use (Adomi, 2012). Awareness is the

general feeling or opinion of an individual about something (Oladosu, 2012). It is the controller of the actual behaviour of an individual consciously or unconsciously. Awareness is a part of cognitive structure people use to organise, systematise their experiences and behaviours. Awareness as established mental set that a person uses to evaluate something favorably or unfavorably. Principals' awareness of AI is their opinion of acceptance or rejection of AI as tool for administrative effectiveness in senior secondary schools. For principals to have the right awareness there should be a forum for principals to develop their AI skills.

The use of AI has increased so as the need for principals to carry out their administrative works effectiveness in senior secondary schools in the latest and recent ways. With the use of particular software, instructors have the opportunity to supervise the results of the students' works, the level achieved by each and the possibility to update their online documents such as notes, images, videos. The use of AI in education has started to appeal the potential and significant progress in administrative effectiveness in senior secondary schools. The impact of AI on administrative effectiveness in senior secondary schools has been acknowledged globally such that the integration of administrative effectiveness in senior secondary schools has become indispensable in today's teaching and learning environment.

Many studies have shown that awareness and utilisation of Artificial Intelligence are strong determinants of students' learning outcomes in English Language, Mathematics, Economics and Biology but to the best knowledge of the researcher, these factors have not been significantly linked to administrative effectiveness in senior secondary schools especially in Abuja Municipal Area, Nigeria. Therefore, this study investigated awareness and utilisation of artificial intelligence as correlates of administrative effectiveness in senior secondary schools in Abuja, Nigeria.

### **Statement of the Problem**

Administrative effectiveness is the positive response to administrative efforts and actions with the intention to accomplish stated goal. The administrative performance in school decision making, delegation of duties to subordinates, and setting good examples and motivating the teachers and students alike in an effort to create a conducive working environment to accomplish school goal and objective seem to enhance subordinate performance for school success. In spite of the importance attached to administrative effectiveness in secondary schools, it is still not very encouraging as the expected result has not been achieved. As a way of addressing this problem, experts, researchers and scholars in education have advocated the use of Artificial Intelligence in improving competence and effectiveness of administrators in secondary schools. All these studies came up with good contributions to administrative effectiveness in senior secondary schools but with less research focus on awareness and utilisation of artificial intelligence as correlates of administrative effectiveness in senior secondary schools especially in Abuja Municipal Area, Nigeria. Therefore, this study investigated awareness and utilisation of artificial intelligence as correlates of administrative effectiveness in senior secondary schools in Abuja Municipal Area, Nigeria.

### **Objectives of the Study**

The study determined the following:

- (i) the level of awareness of Artificial Intelligence in administrative effectiveness in public senior schools in Abuja, Nigeria;

- (ii) the extent administrators utilise Artificial Intelligence for administrative functions in public senior schools in Abuja, Nigeria; and
- (iii) the relationship exists between awareness and utilisation of Artificial Intelligence and administrative effectiveness in public senior schools in Abuja, Nigeria.

### Research Questions

The following questions guided the study:

1. What is the level of awareness of Artificial Intelligence in the administrative effectiveness in public senior secondary schools?
2. To what extent do administrators utilise Artificial Intelligence for administrative effectiveness in senior secondary schools?

### Hypothesis

One hypothesis is generated and tested at 0.05 level of significance to guide the study.

**Ho:** There is no significant relationship between awareness and utilization of artificial intelligence and administrative effectiveness of public senior schools in Abuja, Nigeria

### Methodology

The study adopted the descriptive research design of the correlational type. This design is considered appropriate for the study due to the fact that it is capable of describing giving phenomenon or situation in its true identity without any manipulation. So far, the study is not experimental study, descriptive research design is adopted for the study. Meanwhile, The target population for this study covers all public senior schools in Abuja, the Federal Capital City of Nigeria. There are six area councils in Abuja and numbers of public senior schools are presented in Table 1.

**Table 1:**

**Number of Senior Schools in the Six Area Councils, Abuja**

S/No	Area Council	Number of Schools
1	Abaji	10
2	Bwari	13
3	Abuja Municipal Area Council	30
4	Gwagwalada	13
5	Kuje	13
6	Kwali	9
	<b>Total</b>	<b>88</b>

**Source:** FCT Secondary Education Board \_ SED Statistics at a Glance, 2022

Simple random sampling technique was used to select 40 public senior schools for the study. one principal from each school making a total of 40 principals. In all, a total number of 40 principals were purposively chosen to participate in the study and systematic sampling technique was used to select two vice principals from each chosen school. This makes 80 vice principals available for the study. Hence, there were 120 respondents for the study.

Two structured questionnaires were developed by the researcher as the instruments for data collection. They were: “Principals’ Awareness of Artificial Intelligence Questionnaire (PAAIQ)” and “Principals’ Use of Artificial Intelligence Questionnaire (PUAIQ)”. The

instruments were validated for face, content and construct validity. Moreso, 0.76 and 0.78 were obtained for reliability score for PAAIQ and PUAIQ. Data collection for the study lasted three weeks. Data collected were analysed using descriptive statistics of percentage, frequency count, mean and standard deviation; and inferential statistics of Pearson product moment correlation coefficient.

## Results

Research Question 1: What is the level of awareness of Artificial Intelligence in administrative effectiveness in senior secondary schools?

**Table 2**  
**Percentage, Mean and Standard Deviation of the Level of Awareness of Artificial Intelligence for Administrative Effectiveness in Public Senior Schools in Abuja, Nigeria**

S/N	Items	SA	A	D	SD	Mean	Std.
1	The use of Artificial Intelligence tools promotes administration	60 (50%)	47 (39%)	13 (11%)	-	3.42	.635
2	The use of Artificial Intelligence administrative effectiveness in senior secondary schools is time consuming	39 (32%)	43 (36%)	26 (22%)	12 (10%)	3.00	.877
3	The use of Artificial Intelligence for administrative effectiveness in senior secondary schools makes me to be fully in charge.	62 (52%)	48 (40%)	10 (8%)	-	3.50	.554
4	Using Artificial Intelligence for administrative effectiveness in senior secondary schools deepen my interest in administration.	60 (50%)	50 (41%)	-	10 (8%)	3.45	.638
5	Using Artificial Intelligence in administration makes me to be effective in administration in senior secondary schools.	60 (50%)	35 (29%)	20 (17%)	5 (4%)	3.40	.708
6	The use of Artificial Intelligence for administrative effectiveness in senior secondary schools is not objective.	57 (47%)	41 (34%)	3 (3%)	19 (16%)	2.90	1.194
7	Using Artificial Intelligence in administration in senior secondary schools is not helpful.	43 (36%)	59 (49%)	9 (7.5%)	9 (7.5%)	3.02	.919
8	The use of Artificial Intelligence in administration in senior secondary schools is the best	80 (67%)	40 (33%)	-	-	3.60	.496
9	Using Artificial Intelligence in administration in senior secondary schools stimulates my ability to think very fast	24 (67%)	16 (33%)	-	-	3.60	.496
10	The use of Artificial Intelligence in administration in senior secondary schools facilitate the development of my competence	72 (60%)	31 (26%)	6 (5%)	11 (9%)	3.25	1.031

11	The use of Artificial Intelligence in administration in senior secondary schools develop my ability to perform	59 (49%)	41 (35%)	10 (8%)	10 (8%)	3.32	.797
12	Using Artificial Intelligence in administration in senior secondary schools makes me acquire a wide range of ideas about administrative effectiveness	72 (60%)	31 (26%)	-	17 (14%)	3.47	.640
13	The use of Artificial Intelligence administration in senior secondary schools enables me to become more aware of my strength in administration.	60 (50%)	41 (34%)	9 (8%)	10 (8%)	3.15	1.051
14	Using Artificial Intelligence in administration in senior secondary schools does not make me to be more aware of their problems in administration.	60 (50%)	45 (37%)	2 (2%)	13 (11%)	3.30	.882
15	The use of Artificial Intelligence in administration in senior secondary schools makes me not to be lazy.	72 (60%)	28 (23%)	12 (10%)	8 (7%)	3.32	.858
<b>Standard Mean = 2.50; Weighted Mean= 3.31</b>							

Table 2 shows the level of principals' awareness of Artificial Intelligence in administrative effectiveness in senior schools as revealed by the descriptive analysis of the responses of the respondents to the set items. The results indicates that majority (89%) of the respondents agreed that the use of Artificial Intelligence tools promotes administration, majority (68%) of the respondents agreed the use of Artificial Intelligence administrative effectiveness in senior secondary schools is time consuming, majority (92%) of the respondents agreed that the use of Artificial Intelligence for administrative effectiveness in senior secondary schools makes me to be fully in charge, majority (91%) of the respondents agreed that using Artificial Intelligence for administrative effectiveness in senior secondary schools deepen my interest in administration, majority (79%) of the respondents agreed that using Artificial Intelligence in administration makes me to be effective in administration in senior secondary schools., majority (81%) of the respondents agreed that the use of Artificial Intelligence for administrative effectiveness in senior secondary schools is not objective, majority (85%) of the respondents agreed that using Artificial Intelligence in administration in senior secondary schools is not helpful, all (100%) of the respondents agreed that the use of Artificial Intelligence in administration in senior secondary schools is the best, all (100%) of the respondents agreed that using Artificial Intelligence in administration in senior secondary schools stimulates my ability to think very fast, majority (86%) of the respondents agreed that the use of Artificial Intelligence in administration in senior secondary schools facilitate the development of my competence, majority (84%) of the respondents agreed that the use of Artificial Intelligence in administration in senior secondary schools develop my ability to perform, majority (86%) of the respondents agreed that Using Artificial Intelligence in administration in senior secondary schools makes me acquire a wide range of ideas about administrative effectiveness, majority (84%) of the respondents agreed that the use of Artificial Intelligence administration in senior secondary schools enables me to become more aware of my strength in administration, majority (87%) of the respondents agreed that using Artificial Intelligence in administration in senior

secondary schools does not make me to be more aware of their problems in administration, majority (63%) of the respondents agreed that use of Artificial Intelligence in administration in senior secondary schools makes me not to be lazy. In conclusion, the weighted mean of 3.31 against the threshold of 2.50 implies that the level of principals' awareness of Artificial Intelligence in administrative effectiveness in senior secondary schools of was high.

**Research Question 2: To what extent do principals utilise Artificial Intelligence for administrative effectiveness in senior secondary schools?**

**Table 3**

**Percentatge, Mean and Standard Deviation of Principals' Utilisation of Artificial Intelligence for Administrative Effectiveness in Senior Secondary Schools in Abuja, Nigeria**

S/N	Items	Always	Sometimes	Rarely	Never	Mean	St. D.
1	I make use of Artificial Intelligence for administrative effectiveness	4 (3%)	45 (37%)	55 (46%)	12 (10%)	2.15	.975
2	I can use Artificial Intelligence for administrative effectiveness	11 (9%)	26 (22%)	59 (49%)	24 (20%)	2.25	.926
3	I use Artificial Intelligence for administrative effectiveness to make me carry out my duty.	7 (6%)	20 (16%)	60 (50%)	33 (28%)	1.90	.810
4	I use Artificial Intelligence in administration to improve my competence.	20 (16%)	7 (6%)	33 (28%)	60 (50%)	1.67	.797
5	I use Artificial Intelligence for me to perform administratively well	30 (25%)	21 (18%)	47(39%)	22 (18%)	2.47	1.109
6	I enjoy using Artificial Intelligence for administrative effectiveness	4 (3%)	28 (23%)	55 (46%)	33 (28%)	2.35	1.026
7	I use Artificial Intelligence in administration to take very fast decisions	10 (8%)	14 (12%)	58 (48%)	38(32)	2.27	.960
8	I use Artificial Intelligence in administration for best decision	10 (8%)	16 (13%)	62 (52%)	32(26%)	2.00	.847
9	I take a lot of wrong decisions when using Artificial Intelligence in administration	32 (27%)	60 (50%)	18 (15%)	10 (8%)	3.00	.816
10	I find using Artificial Intelligence in administration not to be easy.	58 (48%)	36 (30%)	10 (8%)	16 (14%)	3.25	.869
<b>Standard Mean = 2.50; Weighted Mean= 2.33</b>							

Table 3 shows the extent principals utilise Artificial Intelligence for administrative effectiveness in senior secondary schools, as revealed by the descriptive analysis of the responses of the respondents to the set items. the results indicates that majority (46%) of the respondents rarely make use of Artificial Intelligence for administrative effectiveness, majority (49%) of the respondents could use Artificial Intelligence for administrative effectiveness, majority (60%) of the respondents rarely used use Artificial Intelligence for administrative effectiveness to carry out my duty, majority (50%) of the respondents never used Artificial Intelligence in administration to improve my competence, majority (39%) of the respondents rarely used Artificial Intelligence to perform administratively well, majority (46%) of the



respondents rarely enjoyed using Artificial Intelligence for administrative effectiveness, majority (48%) of the respondents rarely used Artificial Intelligence in administration to take very fast decisions, majority (52%) of the respondents rarely used Artificial Intelligence in administration for best decision, majority (50%) of the respondents sometimes take a lot of wrong decisions when using Artificial Intelligence in administration, majority (48%) of the respondents found Artificial Intelligence in administration not to be easy. In conclusion, the weighted mean of 2.33 against the threshold of 2.50 implies that the extent principals utilise Artificial Intelligence for administrative effectiveness in public senior schools was low.

**Hypothesis Testing: There is no significant relationship between awareness and utilization of artificial intelligence and administrative effectiveness of public senior schools in Abuja, Nigeria**

**Table 4**

**Relationship between awareness and utilisation of Artificial Intelligence and administrative effectiveness in senior Secondary schools in Abuja, Nigeria**

Variables	N	Mean	Standard Deviation	r	p-value	Sig.
Principals' awareness and Utilization of Artificial Intelligence	120	47.16	11.01	.626	.001	Sig.
Administrative effectiveness of senior schools	120	45.41	8.09			

Table 4 shows the relationship that exists between awareness and utilisation of Artificial Intelligence and administrative effectiveness in senior schools using the Pearson's Product Moment Correlation. The result revealed that there was a positive strong relationship between awareness and utilisation of Artificial Intelligence in administrative effectiveness in senior secondary schools ( $r = .626$ ;  $p = .001 < .05$ ). This implies that a direct relationship existed between awareness and utilisation of Artificial Intelligence in administrative effectiveness in senior secondary schools.

### Discussion of Findings

The findings of this study revealed that principals demonstrated a moderate level of awareness of Artificial Intelligence (AI) applications in educational administration, yet their utilisation of such tools for enhancing administrative effectiveness remained relatively low. This pattern suggests a gap between knowledge and practice, aligning with the observation by Afolabi and Olaleye (2023) that awareness of emerging technologies in Nigerian secondary schools does not necessarily translate into consistent adoption. One possible explanation for the discrepancy between awareness and utilisation is the lack of adequate infrastructural support, professional development opportunities, and institutional policies that encourage AI integration. This aligns with the Technology Acceptance Model (TAM), which posits that perceived usefulness and ease of use are critical determinants of technology adoption (Davis, 1989). While principals in the present study acknowledged the potential benefits of AI tools, such as, automating routine tasks, enhancing data analysis for decision-making, and improving communication many reported barriers such as insufficient training, unreliable internet connectivity, and concerns over data privacy.

The study's findings also indicate a positive and statistically significant relationship between principals' utilisation of AI and their administrative effectiveness. This is consistent with the results of Olatunji and Ige (2022), who found that digital innovations improve timeliness, accuracy, and transparency in school administration. Principals who reported higher levels of AI use demonstrated greater efficiency in resource management, improved monitoring of teaching and learning activities, and enhanced stakeholder communication. This reinforces the notion that AI, when effectively harnessed, can serve as a catalyst for achieving organisational goals in education.

However, the low utilisation levels suggest that principals may require targeted capacity-building programmes focusing on AI literacy, ethical considerations, and context-specific applications in school management. These programmes should be accompanied by policies that promote sustainable technology integration and address infrastructural deficits. In summary, the findings underscore the potential of AI as a transformative tool in educational administration while highlighting the need for systemic interventions to bridge the gap between awareness and utilisation. Without such interventions, principals may remain aware of AI's possibilities but unable to leverage them effectively for improved administrative outcomes.

## Conclusion

The study has shown that the use of Artificial Intelligence for administrative effectiveness in senior secondary schools could be enhanced by principals' awareness and utilisation of AI. Based on the findings, this study has provided a better understanding of awareness and utilisation of artificial intelligence as correlates of administrative effectiveness in senior secondary schools in Abuja Municipal Area, Nigeria.

## Recommendations

Based on the findings of this study, it is recommended that:

1. Ministries of Education and relevant stakeholders should organise continuous professional development programmes for principals, focusing on AI literacy, practical applications in school administration, and ethical considerations of AI use;
2. Government and educational authorities should invest in reliable internet connectivity, electricity, and other digital infrastructure that will support the effective utilisation of AI tools in secondary schools;
3. Clear institutional policies should be developed to guide AI adoption in school administration, addressing issues of data privacy, ethical use, and sustainability;
4. Principals should be encouraged to move beyond mere awareness by adopting AI tools in routine administrative tasks such as data management, communication, and monitoring of school activities, thereby enhancing efficiency and transparency; and
5. Schools should establish partnerships with technology providers, NGOs, and training institutes to access AI solutions, technical support, and resources tailored to the needs of educational administrators.

## References

- Adomi, E.E. (2012). Application of ICT in Nigerian secondary schools. *Journal of Library Philosophy and Practice*. [www. webpages.uidaho.edu/nmbolin/adomi](http://www.webpages.uidaho.edu/nmbolin/adomi)
- AFSA. (2022). Artificial Intelligence and Education. Retrieved

- from <https://www.theschoolleader.org/news/artificial-intelligence-and-education>
- Akinwumi, O. O., B, Yemisi T. & Alegbeleye, G. O. (2021) Information and Communication Technology Use on Effective Administration of Public Secondary Schools, Lagos State, Nigeria. *International Journal of Innovative Research in Education, Technology & Social Strategies*, 8(1) 37-47
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Gift, U. (2018) Administration of Private Secondary Education in a Dwindling Economy in Nigeria. *Journal of Resourcefulness and Distinction*, 16. 1, 215
- Nwiyi, G. U. (2018). Administration of Private Secondary Education in a Dwindling Economy in Nigeria. *Journal of Resourcefulness and Distinction*, 16(1). 215-225
- Ogunode N. J. (2023). AI education in Nigerian Schools. Unpublished paper.
- Ogunode, N, J & Abashi, L. E. (2020). An investigation into the administrative challenges facing the administration of Universal Basic schools in Abaji Area Council of FCT, Abuja, Nigeria. *WORLDWIDE JOURNAL OF RESEARCH*, 1 (3), 27-39.
- Oladosu, K. (2012). Basic technology teachers' awareness and attitude towards the use of information and communication technology for sustainable development in Lagos State education districts: I, IV and VI. *Journal of Education and Practice*. 3(13)
- Olatunji, J. O., & Ige, A. M. (2022). Digital innovations and administrative effectiveness in secondary schools. *African Journal of Educational Technology*, 10(1), 77–91.
- Oztok, M., & Zingaro, D. (2019). *Artificial intelligence in education*. Springer.
- Russell, S. J., & Norvig, P. (2020). *Artificial Intelligence: A Modern Approach* (4th ed.). Pearson. ISBN 978-0134610993