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ARTIFICIAL INTELLIGENCE AND FUTURE SCHOOL MANAGEMENT IN SECONDARY SCHOOLS IN ENUGU STATE

BY

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Abstract

The main purpose of the study was to explore artificial intelligence and future in school management. (the transformative potential of AI in modernizing school administrative and pedagogical systems, focusing on how artificial intelligent technologies can enhance school administration).the study adopted a descriptive survey research design. The population of the study consist of 329 principals and 8628 teachers in Enugu state, A sample of 896 (33 principals and 863 teachers) using Taro Yamane method of sampling was used .The instrument used for data collection was questionnaire developed by the researcher. titled Artificial Intelligence And Future School Management In Secondary Schools In Enugu state (AIFSM). A 17 item questionnaire grouped into 3 sections according to the research question that guided the study. The items were structured in four rating. The reliability of the instrument was determined using test-retest reliability techniques. Out of 896 copies distributed 850 were properly filled and retrieved representing 92% retune rate. Mean and standard deviation was used for data analysis while t-test statistic was used to test the null hypothesis at 0.05 level of significance. Based on the data analysis ,the study conclude that AI for administrative efficiency in secondary school in Enugu state depends on the perception and readiness of educators, availabilities of AI tools ,its implementation and establishing a clear policy framework to guide it use . Among the Recommendations made based on the findings of the study, AI solutions should be implemented with a strong emphasis on Promoting Equity and Accessibility, eliminating educational inequalities. Schools in low-income or rural areas must have access to AI tools and the infrastructure necessary to support them.

Keywords: **Artificial intelligence, future school management**

Introduction

As technology continues to reshape every sector of society, education is undergoing a profound transformation. At the heart of this shift is artificial intelligence (AI), a powerful force that is redefining the way schools operate and manage their daily functions. From streamlining administrative tasks to personalizing student learning experiences, AI is emerging as a game-changer in school management. The traditional methods of running educational institutions are gradually giving way to smarter, data-driven approaches that promise greater efficiency, improved decision-making, and enhanced learning outcome.). In education, AI has been seen to have already begun initiating new teaching and learning solutions that are currently under trial and undergoing restructuring in different contexts (Bostrum, 2017).

In recent years, artificial intelligence (AI) has moved beyond the realm of science fiction and academic theory to become a transformative force across industries—and education is no exception. As schools face growing demands for efficiency, personalization, and innovation, AI is stepping in to revolutionize not only how students learn but also how schools are managed. From automating administrative tasks and improving resource allocation to supporting data-driven decision-making and enhancing communication among stakeholders, AI offers school leaders new tools to tackle long-standing challenges in education management.

School administrators today are expected to balance a wide array of responsibilities—monitoring student performance, managing budgets, ensuring staff productivity, maintaining safety, and responding to the evolving expectations of parents and policymakers. Traditionally, these tasks have relied heavily on manual processes and human judgment. However, AI introduces the possibility of streamlining operations with predictive analytics, real-time insights, and intelligent automation that can help schools function more smoothly and proactively.

Moreover, as classrooms become more digitized and hybrid learning environments grow more common, the role of AI in supporting and enhancing educational ecosystems will only expand. This article explores how artificial intelligence is reshaping school management—from administration to academic planning—and examines the opportunities In recent years, artificial intelligence (AI) has moved beyond the realm of science fiction and academic theory to become a transformative force across industries—and education is no exception. As schools face growing demands for efficiency, personalization, and innovation, AI is stepping in to revolutionize not only how students learn but also how schools are managed. From automating administrative tasks and improving resource allocation to supporting data-driven decision-making and enhancing communication among stakeholders, AI offers school leaders new tools to tackle long-standing challenges in education management. AI also supports strategic resource management in schools. Intelligent systems can analyze historical data to forecast staffing needs, budget

allocations, and infrastructure requirements. As noted by Luckin et al. (2016), such capabilities enable schools to make informed, long-term decisions that improve operational efficiency and reduce waste.

School administrators today are expected to balance a wide array of responsibilities—monitoring student performance, managing budgets, ensuring staff productivity, maintaining safety, and responding to the evolving expectations of parents and policymakers. Traditionally, these tasks have relied heavily on manual processes and human judgment. However, AI introduces the possibility of streamlining operations with predictive analytics, real-time insights, and intelligent automation that can help schools function more smoothly and proactively. Moreover, as classrooms become more digitized and hybrid learning environments grow more common, the role of AI in supporting and enhancing educational ecosystems will only expand. This article explores how artificial intelligence is reshaping school management—from administration to academic planning—and examines the opportunities.

Artificial intelligence (AI) is increasingly becoming a transformative force in the educational sector, particularly in school management. Its integration promises a future where administrative efficiency, personalized learning, and data-driven decision-making are the norm rather than the exception. One of the most significant advantages of AI in school management is the automation of routine administrative tasks. According to Holmes et al. (2019), AI systems can handle processes such as attendance tracking, grading, and timetable generation, allowing staff to focus more on pedagogical responsibilities. This automation not only saves time but also reduces human errors and enhances overall institutional efficiency. Moreover, AI offers the potential for personalized education by analyzing student data to tailor learning experiences. As noted by Luckin et al. (2016), AI-powered platforms can adapt content delivery based on individual learning styles and paces, leading to improved academic performance and engagement. This capability is especially crucial in diverse classrooms where students' needs vary significantly.

AI also plays a key role in predictive analytics. By analyzing historical and real-time data, AI tools can forecast student performance, identify those at risk of dropping out, and recommend interventions (Zawacki-Richter et al., 2019). This proactive approach enables educators to address challenges before they escalate, promoting student retention and success. AI also plays a key role in predictive analytics. By analyzing historical and real-time data, AI tools can forecast student performance, identify those at risk of dropping out, and recommend interventions (Zawacki-Richter et al., 2019). This proactive approach enables educators to address challenges before they escalate, promoting student retention and success.

Additionally, communication between schools and stakeholders—students, parents, and staff—can be enhanced through AI-powered chatbots and digital assistants. These tools provide instant responses to

queries, automate reminders for events or deadlines, and support multilingual communication, fostering better engagement and accessibility (Chen, 2020).Despite these benefits, there are concerns related to the ethical use of AI in schools. Issues such as data privacy, algorithmic bias, and the digital divide must be addressed to ensure equitable and responsible implementation. As Williamson and Eynon (2020) argue, the deployment of AI in education should be guided by clear policies and ethical frameworks to protect learners and uphold the integrity of educational systems.

Artificial Intelligence in School

Artificial intelligence (AI) is increasingly becoming an integral part of school systems around the world, offering transformative potential for both learning and administrative processes. In education, AI technologies are primarily being used to personalize learning experiences, automate administrative tasks, and enhance educational outcomes through data-driven decision-making. One of the most impactful uses of AI in schools is in personalized learning. Intelligent tutoring systems and adaptive learning platforms use algorithms to analyze individual student performance and tailor educational content accordingly. According to Holmes et al. (2019), these systems can provide real-time feedback and adjust the difficulty of tasks to suit a student's learning pace, thereby improving engagement and retention.AI is also reshaping the administrative side of school management. Automation of tasks such as attendance, grading, and scheduling has helped reduce the burden on teachers and school administrators. As pointed out by Luckin et al. (2016), AI-driven systems can streamline workflows and allow educators to focus more on pedagogy rather than paperwork. Moreover, predictive analytics powered by AI can be used to identify students at risk of falling behind or dropping out. By analyzing patterns in attendance, grades, and behavior, schools can intervene earlier and provide targeted support (Baker & Inventado, 2014). This proactive approach has been found to significantly improve student outcomes in various pilot programs globally. Despite its advantages, the use of AI in schools also raises concerns around privacy, data ethics, and algorithmic bias. As Williamson and Piattoeva (2022) argue, the collection and use of student data must be handled with transparency and care to ensure trust and fairness in AI-driven decision-making.

The Various Applications of AI in School Management and the Benefits they bring.

Artificial intelligence (AI) is increasingly becoming a transformative force in education, particularly in the realm of school management. By automating administrative tasks, providing data-driven insights, and personalizing learning experiences, AI is helping educational institutions operate more efficiently and effectively. This section explores the various applications of AI in school management and the benefits they bring.

1. Automating Administrative Tasks

AI streamlines several administrative processes, reducing the burden on staff and allowing them to focus on more critical tasks. Key areas include:

- **Attendance Tracking**: AI systems can automate attendance through facial recognition or biometric systems, ensuring accuracy and saving time for teachers and administrators .
- **Scheduling and Timetabling**: AI algorithms analyze teacher availability, student preferences, and room allocations to create optimized schedules, minimizing conflicts and maximizing resource utilization .
- **Grading and Assessment**: AI-powered grading systems can evaluate multiple-choice exams or assignments, providing quick and accurate results, which reduces the time and effort required for manual grading .
- **Communication and Correspondence**: AI chat bots handle routine inquiries from students, parents, and staff, providing instant responses and assistance, thereby enhancing communication efficiency within the school community .

2. Enhancing Decision-Making with Predictive Analytics

AI-driven predictive analytics assist school administrators in making informed decisions by analyzing historical data and forecasting future trends. Applications include:

- **Early Identification of At-Risk Students**: AI models can detect patterns indicating students who may struggle or drop out, allowing for early intervention and tailored support programs .
- **Resource Allocation**: AI analytics help schools optimize class sizes, staffing, and budgets based on enrollment trends and facility usage, leading to more efficient use of resources .
- **Curriculum Optimization**: AI tools analyze student performance data to assess and refine curriculum effectiveness, ensuring it meets the evolving needs of students .

3. Personalizing Learning Experiences

AI enables personalized learning by tailoring educational content to individual student needs. This personalization enhances engagement and academic outcomes. For instance:

- **Adaptive Learning Platforms**: AI-driven platforms assess individual student progress and provide personalized learning recommendations, allowing educators to tailor instruction to meet the unique needs of each student .
- **Recommendation Systems**: AI algorithms suggest appropriate resources, courses, and activities based on a student's learning history and goals, facilitating a customized learning journey.

4. Supporting Teacher Professional Development:

AI also plays a role in enhancing teaching effectiveness and supporting professional growth:

- **Performance Analysis**: AI-powered analytics evaluate teaching effectiveness and help educators refine their methods, leading to improved student outcomes .
- **Professional Development**: AI can recommend relevant professional development opportunities based on a teacher's goals and areas of improvement, fostering continuous growth .

5. Ensuring Security and Compliance

AI contributes to maintaining a safe and compliant educational environment:

- **Security Monitoring**: AI systems can detect and prevent security breaches, protecting sensitive student and institutional data .
- **Data Privacy Compliance**: AI tools assist institutions in adhering to data privacy regulations by monitoring data handling practices and ensuring compliance.

In conclusion, AI is revolutionizing school management by automating administrative tasks, enhancing decision-making through predictive analytics, personalizing learning experiences, supporting teacher development, and ensuring security and compliance. As AI technology continues to evolve, its integration into educational institutions is expected to deepen, further transforming the landscape of school management. student data must be handled with transparency and care to ensure trust and fairness in AI-driven decision-making.

Statement of problem

The integration of Artificial Intelligence (AI) into the management of secondary schools in Enugu State presents several challenges that hinder its effective implementation. These challenges encompass infrastructural deficits, limited AI integration, inadequate teacher training, and financial constraints Despite the potential benefits of AI, its integration into the administration of secondary schools in Enugu State remains minimal. A study by Okey and Chukwu (2025) found that AI is integrated to a very low extent in the administration of public secondary schools, particularly in financial and human resource management. This limited integration hampers the potential benefits AI could bring to school management processes. Many secondary schools in Enugu State lack the necessary infrastructure to support AI integration. A study by Agada and Eze (2022) revealed a near-total lack of Information and Communication Technologies (ICTs) and non-utilization of such for the management of secondary schools in the state. This infrastructural deficit hampers the effective use of AI tools in education. The successful integration of AI into education requires teachers to be adequately trained in its use. However, many teachers in Enugu State are not sufficiently trained in AI tools for instructional purposes. A study

by Onuh and Charles (2025) found that a significant number of teachers in the state are not adequately trained in the use of AI tools for instructional purposes. This lack of training limits the potential of AI to enhance teaching effectiveness and student learning outcomes. The implementation of AI in school management requires substantial financial investment. However, Enugu State's education sector faces challenges related to underfunding, with inadequate budget allocations for infrastructure development and teacher welfare. This financial constraint hampers the state's ability to adopt and sustain AI technologies in schools. The integration of AI into the management of secondary schools in Enugu State faces multifaceted challenges, including limited technological infrastructure, teacher shortages, inadequate training, financial constraints, governance issues, security concerns, and cultural misalignment. Addressing these challenges requires a coordinated effort from the government, educational institutions, and other stakeholders to create an enabling environment for the effective use of AI in education. this study seek to examine the challenges that could hinders the effective implementation and integration of AI into the management of secondary schools in Enugu state Nigeria.

Purpose of the Study:

The main purpose of the study is to examine artificial intelligence and future school management in secondary schools in Enugu state. it aims is to examine the challenges that could hinder the effective implementation and integration of AI in the management of public secondary schools in Enugu state Nigeria . Specifically this study intend to;

1. To examine the extent Artificial Intelligence be leveraged to enhance administrative efficiency and resource allocation in Enugu State's secondary schools.
2. To examine the perceptions and readiness of educators in Enugu State towards adopting AI tools for instructional purposes.
3. To identify infrastructural and policy frameworks necessary to support the sustainable implementation of AI in secondary schools across Enugu State.

Research Question:

1. How can Artificial Intelligence be leveraged to enhance administrative efficiency and resource allocation in Enugu State's secondary schools?
2. What are the perceptions and readiness of educators in Enugu State towards adopting AI tools for instructional purposes in secondary schools in Enugu state?
3. What infrastructural and policy frameworks are necessary to support the sustainable implementation of AI in secondary schools in Enugu State?

Hypotheses

The following null hypotheses formulated guided the study: will be tested at 0.5% level of significant:

Ho1: There is no significant difference in the mean responses of principal and teachers on how AI can be leveraged to enhance administrative efficiency and resource allocation in secondary schools in Enugu state.

Ho2: There is no statistically significant difference between the mean responses of principal and teachers on the perception and readiness level of educators in Enugu state toward the adoption of AI tools for instructional purposes in secondary schools in Enugu state.

Ho3. There is no significant difference in the mean responses of principal and teachers on the infrastructural and policy framework being adequate to support the sustainable implementation of AI in secondary schools in Enugu state.

Method

The study adopted a descriptive survey research design. The population of the study consist of 329 principals and 8628 teachers in Enugu state, A sample of 896 (33 principals and 863 teachers) using Taro Yamane method of sampling .The instrument for data collection was questionnaire titled Artificial Intelligence And Future School Management In Secondary Schools In Enugu state (AIFSMSSES). A 17 item questionnaire grouped into 3 section according to the research question that guided the study. The items were structured in four rating scale of strongly Agreed (SA)3.50-4.00, Agreed(A)2.5-3.49, Disagreed(D)1.50-2.49,and Strongly disagreed(SD)1.00-1.49, with weighting numerical value of 4, 3,2 and 1 respectively . The instrument was validated by three expert, two in Education management and one in measurement & Evaluation in the department of Education all in Peace Land University Enugu. The reliability of the instrument was determined using test-retest reliability techniques. The copies of the questionnaire distributed, out of 896 copies distributed 850 were properly filled and retrieved representing 92% retune rate. The data collected was analyzed using Mean rating was used to analyzed the collected data while t-test statistic was used to test the null hypothesis at 0.05 level of significant. The findings of the study were presented in table as follows:

Research Question 1:
How can Artificial Intelligence be leveraged to enhance administrative efficiency and resource allocation in Enugu State's secondary schools?

Table1.

Artificial Intelligence is leveraged to enhance administrative efficiency and resource allocation in Enugu State's secondary schools?

Items:1. How can Artificial Intelligence be leveraged to enhance administrative efficiency and resource allocation in Enugu State's secondary schools?	**Principals** N = 33 ×	**SD**	**Teachers** N = 863 ×	**SD**	**Overall** N = 896 ×	**SD**	**Decision**
1. I am familiar with the concept of Artificial Intelligence (AI).	2.5	0.65	2.47	0.65	2.5	0.65	Agreed
2. I understand how AI can be applied in Educational administration.	3.05	0.38	3.07	0.41	3.06	0 4	Agreed
3. The use of AI has reduced the time spent On administrative tasks in our school.	3.11	0.34	3.14	0.38	3.13	0.36	Agreed
4. A.I has improved the accuracy of data Management.	3.06	0.57	2.98	0 .55	3.05	0.56	Agreed
5. AI has facilitated better communication between school administrators, teachers, and parents.	3.08	0.37	3.04	0.42	3.06	0.4	Agreed
6. Our school uses AI tools for administrative tasks such as scheduling and record-keeping	2.4	0.66	2.28	0.67	2.34	0.67	Disagree
Cluster mean and standard deviation =	2.87	0.5	2.83	0.51	2.85	0.51	Agreed

Table 1

The result of the data analysis shows the item 1 has a mean rating of 2 .34 which indicated disagreed .Then ,items 1 to 5 have mean rating ranging from 2.5 to 3.13 showing agreed. This means that the itemized are how Artificial Intelligence be leveraged to enhance administrative efficiency and resource allocation in Enugu State's secondary schools. The overall cluster mean of 2.85 implies agreed response and cluster standard deviation of 0.51 indicates that the opinion of the respondent are tight and compact which implies homogenous.

Ho1: There is no significant difference in the mean responses of principal and teachers on how AI can be leveraged to enhance administrative efficiency and resource allocation in secondary schools in Enugu state.

Table 2: T-test analysis on the mean ratings with standard deviation on the responses of principals and teachers regarding on how AI can be leveraged to enhance administrative efficiency and resource allocation in secondary schools in Enugu state.

Variables	**X**	**SD**	**N**	**DF**	**t-cal**	**t-tab**	**P**	**Decision**
Principals	2.87	0.50	33	896	0.435	1.96	0.05	Not significant
Teachers	2.83	0.51	863					

Table 2:
Show that the calculated t-value for 6 items at 0.5level of significance and 896 degree of freedom is 0.435 while the critical value is 1.96 . Since the t-critical is higher than the t-calculated value, the null hypotheses is therefore not rejected. This implies that no significant difference exist between the mean rating of principals and teachers regarding on how AI can be leveraged to enhance administrative efficiency and resource allocation in secondary schools in Enugu state.

Research Question2
What are the perceptions and readiness of educators in Enugu State towards adopting AI tools for instructional purposes?

Table 3
The perceptions and readiness of educators in Enugu State towards adopting AI tools for instructional purposes?

ITEMS: 2. The perceptions and readiness of educators in Enugu State towards adopting AI tools for instructional purposes?	**Principals** N = 33 ×	**SD**	**Teachers** N = 863 ×	**SD**	**Overall** N =896 ×	**SD**	**Decision**
7. I am open to adopting AI tools to improve administrative processes in our school.	3.06	0.42	3.03	0.45	3.05	0.44	Agreed
8. I believe that AI can significantly enhance administrative efficiency in our school.	3.15	0.36	3.05	0.59	3.1	0.48	Agreed
9. Continuous professional development programs on AI should be organized for school staff.	3.8	0.51	3.74	0.65	3.77	0.58	SA
10. I am open to adopting AI tools to improve administrative processes in our school.	2.99	0.5	3.03	0.41	3.01	0.46	Agreed
Cluster mean and standard deviation =	3.25	0.45	3. 21	0.53	3.23	0.49	Agreed

Table 3 shows that item 7,8 and 10 have mean ratings range from 3.01 to 3.1 showing agreed, item 9 have mean rating of 3.77 which indicates strongly agreed. This means that the itemized are the perceptions and readiness of educators in Enugu State towards adopting AI tools for instructional purposes. The overall cluster mean of 3.23 implies agreed response and a cluster standard deviation of 0.49 indicates that the opinion of the respondents are homogenous.

Ho2. There is no statistically significant difference between the mean responses of principal and teachers on the perception and readiness level of educators in Enugu state toward the adoption of AI tools for instructional purposes in secondary schools in Enugu state

Table 4:

T-test analysis on the mean ratings with standard deviation on the responses of principals and teachers regarding on the perception and readiness level of educators in Enugu state toward the adoption of AI tools for instructional purposes in secondary schools in Enugu state.

Variables	X	SD	N	DF	t-cal	t-tab	P	Decision
Principals	3.25	0.45	33	896	0.475	1.96	0.05	Not significant
Teachers	3.21	0.53	863					

Table 4 show that the calculated t-value for 4 items at 0.5level of significance and 896 degree of freedom is 0.475 while the critical value is 1.96 . Since the t-critical is higher than the t-calculated value, the null hypotheses is therefore not rejected. This implies that no significant difference exist between the mean rating of principals and teachers regarding on the perception and readiness level of educators in Enugu state toward the adoption of AI tools for instructional purposes in secondary schools in Enugu state .

Research Question 3

What infrastructural and policy frameworks are necessary to support the sustainable implementation of AI in secondary schools across Enugu State?

Table 5

Infrastructural and policy frameworks are necessary to support the sustainable implementation of AI in secondary schools across Enugu State

Items:3. What infrastructural and policy frameworks are necessary to support the sustainable implementation of AI in secondary schools across Enugu State?	**Principals** N = 33 ×	**SD**	**Teachers** N = 863 ×	**SD**	**Overall** N =896 ×	**SD**	**Decision**
11. There is a need for specialized training Programs to equip staff with the skills required for effective AI integration.	3.04	0.4	2.96	0.56	3.0	0.48	Agreed
12. Teachers in our school have received training on the use of AI tools for teaching and administration.	2.84	0.73	2.88	0.74	2.86	0.74	Agreed
13. There is a consistent power supply in our school to ensure uninterrupted use of AI tools.	2.25	0.62	2.26	0.6	2.54	0.61	Agreed
14. Our school has reliable internet connectivity to support AI applications.	2.23	0.6	2.2	0.6	2.23	0.6	Disagree
15. Our school possesses the necessary hardware (e.g., computers, tablets) to implement AI-based	2.02	0.65	2.0	0.55	2.11	0.6	Disagree

solutions.							
16. There is a clear policy framework guiding the integration of AI in our school's operations.	2.9	0.77	2.96	0.69	2.92	0.73	Agreed
17. The state government has provided guidelines for the ethical use of AI in education.	3.0	0.63	3.05	0.67	3.03	0.65	Agreed
Cluster mean and standard deviation =	2.6	0.63	2.6	0.63	2.6	0.63	Agreed

The result of the data analysis in table three shows that item 14 and 15 have mean rating of 2.23 and 2.11 each indicates disagreed. The remaining 5 items have mean rating ranging from 2.54 to 3.03 showing agreed. This means that the items agreed are the Infrastructural and policy frameworks are necessary to support the sustainable implementation of AI in secondary schools across Enugu State, and the items on disagreed are the ones need to be addressed for its effectiveness and efficiency. The overall cluster mean of 2.6 implies agreed response and the cluster standard deviation of 0.63 indicates that the response are moderate .

Ho3. there is no significant difference in the mean responses of principal and teachers on the infrastructural and policy framework being adequate to support the sustainable implementation of AI in secondary schools in Enugu state.

Table 6 : t-test analysis on the mean ratings with standard deviation on the responses of principals and teachers regarding on the infrastructural and policy framework being adequate to support the sustainable implementation of AI in secondary schools in Enugu state.

Variables	**X**	**SD**	**N**	**DF**	**t-cal**	**t-tab**	**P**	**Decision**
Principals	2.6	0.63	33	896	0	1.96	0.05	Not significant
Teachers	2.6	0.63	863					

Table 6 show that the calculated t-value for 4 items at 0.5level of significance and 896 degree of freedom is 0 while the critical value is 1.96 . Since the t-critical is higher than the t-calculated value, the null hypotheses is therefore not rejected. This implies that no significant difference exist between the mean rating of principals and teachers regarding on the infrastructural and policy framework being adequate to Support The Sustainable Implementation Of AI In Secondary Schools In Enugu .

Discussion of Findings

The findings of the study according to research question one showed that the itemized are how Artificial Intelligence be leveraged to enhance administrative efficiency and resource allocation in secondary school. AI to be used effectively or strategically in order to gain advantage or improve outcome : needs to understand the concept of AI by educators, how AI can be applied in educational administration , The use of AI has reduced the time spent On administrative tasks in our school ,A.I has improved the accuracy of data Management, AI has facilitated better communication between school administrators, teachers, and parents and to ensure the uses AI tools for administrative tasks such as scheduling and record-

keeping. the result of the study is supported by Zawacki-Richter et al. (2019), AI chatbots enhance communication efficiency and reduce the workload of administrative staff. AI also supports strategic resource management in schools. Intelligent systems can analyze historical data to forecast staffing needs, budget allocations, and infrastructure requirements. As noted by Luckin et al. (2016), such capabilities enable schools to make informed, long-term decisions that improve operational efficiency and reduce waste. According to Holmes et al. (2019), AI systems can handle processes such as attendance tracking, grading, and timetable generation, allowing staff to focus more on pedagogical responsibilities. This automation not only saves time but also reduces human errors and enhances overall institutional efficiency. The result indicates that no significant difference exist between the mean rating of principals and teachers regarding on how AI can be leveraged to enhance administrative efficiency and resource allocation in secondary schools in Enugu state.

In addition, the finding of the study according to research question two showed that the perceptions and readiness of educators in Enugu State towards adopting AI tools for instructional purposes ,thereby that school administrators are open to adopting AI tools to improve administrative processes in our school , they also believe that AI can significantly enhance administrative efficiency in our school by introducing Continuous professional development programs on AI organized for school staff which will increase openness to adopting AI tools to improve administrative processes in our secondary schools in Enugu state .the study is supported by Bostrum (, 2017) who argued that AI has been seen to have already begun initiating new teaching and learning solutions that are currently under trial and undergoing restructuring in different contexts. Chen,(2020) was of the opinion that AI tools provide instant responses to queries, automate reminders for events or deadlines, and support multilingual communication, fostering better engagement and accessibility. The result also indicates that no significant difference exist between the mean rating of principals and teachers regarding on the perception and readiness level of educators in Enugu state toward the adoption of AI tools for instructional purposes in secondary schools in Enugu state .

Furthermore, the findings of the study according to research question three shows that Infrastructural and policy frameworks are necessary to support the sustainable implementation of AI in secondary schools across Enugu State such as There is a need for specialized training Programs to equip staff with the skills required for effective AI integration, Teachers in our school have received training on the use of AI tools for teaching and administration, There is a consistent power supply in our school to ensure uninterrupted use of AI tools , There is a clear policy framework guiding the integration of AI in our school's operations. The state government has provided guidelines for the ethical use of AI in education. And that the following need to be looked into school having reliable internet connectivity to support AI applications And Our school possesses the necessary hardware (e.g., computers, tablets) to implement AI-based solutions. the findings of the study is supported by Williamson and Eynon (2020) who argued

that the deployment of AI in education should be guided by clear policies and ethical frameworks to protect learners and uphold the integrity of educational systems. UNESCO,(2021) agued that Promote Equity and Accessibility AI solutions should be implemented with a strong emphasis on reducing—not exacerbating—educational inequalities. Schools in low-income or rural areas must have access to AI tools and the infrastructure necessary to support them. Policies should support equitable funding and resource distribution to prevent a digital divide in education. . The result also indicates that that no significant difference exist between the mean rating of principals and teachers regarding on the infrastructural and policy framework being adequate to Support The Sustainable Implementation Of AI In Secondary Schools In Enugu state.

Conclusion

The findings of the study indicates how Artificial Intelligence be leveraged to enhance administrative efficiency and resource allocation in secondary school. AI to be used effectively or strategically in order to gain advantage or improve outcome : needs to understand the concept of AI by educators, how AI can be applied in educational administration , The use of AI has reduced the time spent On administrative tasks in our school ,AI has improved the accuracy of data Management, AI has facilitated better communication between school administrators, teachers, and parents and to ensure the uses AI tools for administrative tasks such as scheduling and record-keeping . Also perceptions and readiness of educators in Enugu State towards adopting AI tools for instructional purposes ,thereby that school administrators are open to adopting AI tools to improve administrative processes in our school , they also believe that AI can significantly enhance administrative efficiency in our school by introducing Continuous professional development programs on AI organized for school staff which will increase openness to adopting AI tools to improve administrative processes in our secondary schools in Enugu and There should be a clear policy framework guiding the integration of AI in our school's operations. state government should provide guidelines for the ethical use of AI in education. The study Therefore , conclude that AI for administrative efficiency in secondary school in Enugu state depends on the perception and readiness of educators, availabilities of AI tools ,its implementation and establishing a clear policy framework to guide it use.

Recommendation

Based on the findings the following recommendations were made;

1. Principals , Teachers and school staff need targeted Training and Digital Literacy for professional development and to effectively use and supervise AI tools in the classroom and administrative tasks.

2. AI solutions should be implemented with a strong emphasis on Promoting Equity and Accessibility, eliminating educational inequalities. Schools in low-income or rural areas must have access to AI tools and the infrastructure necessary to support them.

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