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Application of Artificial Intelligence Tools on Teachers' Creative Instructional Practices in Public Secondary Schools in Rivers State

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A B S T R A C T
This study investigates the application of artificial intelligence tools on teachers' creative instructional practices in public secondary schools in Rivers State. 3 research questions and 3 hypotheses were raised. The descriptive survey research design was used for this study. The population of the study consisted of all the 290 public secondary schools in Rivers State with a population of 6,893 teachers in these schools. A sample size of 689 teachers in the rural and urban areas representing 10% of the population served as respondents. The multi stage sampling technique was employed. A 15-item questionnaire was used for data collection. Cronbach alpha statistics was used to obtain 0.74 reliability. Mean/standard deviation were used for research questions and z-test statistics was used to test the hypotheses at 0.05 level of significance. The result amongst others revealed that, teachers do not currently utilize adaptive learning platforms, they do not utilize AI-powered assessment tools to automate test creation, grade papers, they do not utilize AI speech, language and accessibility tools to help students with disabilities or language challenges. The challenges teachers face is, many teachers see AI as a threat to their professional roles, poor access to computers coupled with unreliable internet services, unstable electricity supply and lack of required infrastructures/facilities. It was recommended that, Regular professional development programmes should be organized to improve teachers' digital literacy and competence in using AI tools creatively for instructional delivery.

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Introduction

Over the years, the rise of artificial intelligence (AI) in the practice of education promises to transform the way teachers practice, design and deliver instructions. AI-driven systems are systematically revolutionizing traditional teaching methods by provide high-quality educational content and individualized tutoring to students, no matter where they might be. The integration of AI technologies into education has led to transformative shifts in classroom instruction, enhancing learning experiences, encouraging student engagement, streamlining administrative tasks and learning outcomes (Brewer, 2024). Technologies like intelligent tutoring systems and adaptive learning platforms provide personalized experiences tailored to individual student needs, increasing both engagement and academic performance. AI integration into education does not necessarily mean using only new tools; but it simply

means a basic change in how education ought to be delivered and consumed.

AI tools offer promising avenues for practically enhancing teachers' creativity in instructional planning and delivery which enables teachers to focus on innovative pedagogical strategies. In secondary schools, AI tools are increasingly used to support lesson planning, individualized learning, formative and summative assessments, and classroom engagement (Pearson, 2025; EdWeek, 2024). It is not farfetched that teachers' effective instructional practices significantly impact student engagement and learning outcomes. Obviously, application of AI into teaching stimulates teacher creativity by freeing time for innovative pedagogical strategies and enhancing instructional quality. According to Graesser (2018) and Pearson (2025), tools like ChatGPT, Canva AI, and MagicSchool.ai enable teachers craft lesson activities, writing prompts, presentations, and classroom visuals which enables creative variations in instructional delivery.

There are AI platforms that teachers utilize which enriches their creative capacity to design scaffolded learning experiences for quality instructional delivery such as AutoTutor, Carnegie Learning, Squirrel AI, and Khanmigo adapt content and challenge levels to individual student needs. Generative tools help create varied and context-specific materials, such as creative prompts or locally relevant examples fostering flexibility and innovation in teaching (Time, 2023). Teacher's application of AI tools has the capacity to change instructional practices into a more efficient, inclusive, and responsive education that will respond positively to the 21st century educational pursuit. Though, a lack of devices, connectivity, and in-school infrastructure may be hindrances to the broad application of AI tools (Futurity, 2024; Pearson, 2025).

Artificial Intelligence (AI) Tools Utilized by Teachers that Enhances their Creative Instructional Practices

Artificial Intelligence (AI) tools are practically being integrated into classrooms by teachers to support personalize learning, reduce administrative workload, enhance instructional delivery, and improve student outcomes. The integration and application of these tools have attracted more efficient, and engaging teaching methods in secondary education delivery. The types of AI tools used for instructional delivery can be categorized based on their functionality and application in the teaching process. In view of this, Graesser (2018), Pane, 2017), Woolf (2021) and Brewer (2024) unveiled commonly used by teachers for self-development and instructional practices. Some of which are:

Adaptive Learning Platforms: These platforms analyse student data to tailor instructional content and pace according to individual learning styles. Examples are; DreamBox, Smart Sparrow, Knewton**.** Teachers incorporate these systems to provide differentiated instruction, especially in mathematics and literacy which has been shown to improve student retention and reduce achievement gaps (Pane, 2017).

Intelligent Tutoring Systems (ITS): These AI systems is designed to mimic one-on-one tutoring by offering real-time, adaptive instruction rationally tailored to student needs individually. Examples are; Squirrel AI, Carnegie Learning, Khanmigo (Khan Academy), AutoTutor which provide personalized math or science tutoring, monitor progress, and adjust difficulty based on general learner response (Graesser, 2018).

Generative AI Tools for Content Creation which helps teachers efficiently and creatively to design lesson plans, assessments, presentations, and educational materials. Examples are; ChatGPT, Eduaide.ai, MagicSchool.ai, Canva AI. Teachers apply these tools to create summaries, quizzes, generate customized learning content and feedback for students which helps in savings time for lesson planning.

AI-Powered Assessment Tools which automate test creation, gives feedback and grading and allows for efficient and objective evaluation, like Gradescope, Quizizz AI, Quillionz. Teachers who have the knowledge or trained to utilize these tools uses them to grade papers using handwriting recognition, design quizzes and provide instant feedback (Woolf, 2021).

AI Classroom Assistants and Management Tools which support classroom logistics and management tasks that enhances teacher's efficiency in instructional delivery. Examples are Microsoft Copilot, LanSchool, Google Gemini, GoGuardian. These tools support personalized email and documentation, helps teachers to manage attendance, student device usage, and classroom behaviour. Such tools tools like

Microsoft Copilot are said to reduce teacher administrative burden (American Federation of Teachers, 2024).

AI Speech, Language and Accessibility Tools which support inclusive learning by helping students with disabilities or language challenges. Such tools like Google Text-to-Speech, Microsoft Immersive Reader, Otter.ai, Grammarly. These tools are applied by teachers to translate texts, assist students with dyslexia, support ESL learners, and improve writing mechanics which also enhances literacy development and classroom participation (Microsoft Education, 2022).

Gamified AI Learning Tools which are embedded in educational games to promote engagement and facilitate mastery through fun activities. Such tools like Kahoot! with AI, Classcraft, Minecraft Education Edition which teachers integrate into lesson delivery for formative assessments and collaborative tasks (Burden & Kearney, 2020).

Predictive Analytics and Learning Analytics Tools which helps to track student progress and predict performance or dropout risks to aid early intervention. Examples are BrightBytes, Edmodo Insight.

Extent The Use of AI Tools Influence Teachers' Creative Approaches to Instructional Delivery

The application of AI tools is systematically transforming how teachers approach instructional delivery, as it enhances their creativity, adaptability, responsiveness and effectiveness in classroom delivery. Through the utilization of AI tools, teachers focus more on crafting engaging and effective learning experiences. personalize instruction and analyse student data, adjust content in line with student's needs, pace and level of understanding purposefully to foster more dynamic, student-centered learning environments to swiftly enhance engagement to improve academic outcomes (AFT (2024, 2024). The application of AI helps teachers to personalize learning to be creatively incline in tailoring instructional content to meet the diverse needs of learners. That is, tools like Socratic by Google, Knewton, and Century Tech which analyses student data gives teacher the opportunity to adapt instructional content, making learning more student-centered (DigitalDefynd, 2025).

In this vein, EdWeek (2024) revealed that, AI-driven adaptive learning tools practically and systematically drive teachers to customize instruction to encourage creative curriculum planning to suit varying student abilities purposefully to boost their academic outcomes. Teachers with the knowledge and application of AI driven tools are influences to be conversant with automating grading, attendance, and other administrative duties. Teachers' utilization of AI tools gives them more time to focus on designing innovative lessons, using multimedia tools, and experimenting with instructional strategies. In the findings of Pearson (2025), the report showed that teachers using AI for administrative tasks were 30% more likely to engage in project-based and experiential learning activities. AI tools such as ChatGPT, Canva AI, and MagicSchool help teachers generate creative content, lesson plans, quizzes, and visual aids which influences their creativity in instructional delivery.

These AI tools support multimodal teaching, encouraging interactive and engaging lessons. Time (2023) observes that AI's accessibility features allow teachers to think creatively about how to reach and teach every learner, regardless of ability or language and provide insights for self-evaluation. Futurity (2024) emphasizes that AI tools influences and support teachers in creating highly engaging and diverse teaching materials that cater to multiple learning styles making teachers to adjust their methods creatively in real time, especially using tools like Edmodo, Quizizz AI, and Google Classroom. The study of MDPI (2024) revealed that application of AI tools influences teachers by identifying learning gaps and redesign lessons were necessary. AI tools influence teachers to co-create interdisciplinary projects by integrating subjects such as science, technology, arts, and humanities through simulation and modeling tools like Phet AI Simulations and CoSpaces Edu.

Challenges Teachers Face in the Application of AI Tools on Creative Instructional Practices

There are many challenges affecting the application of AI tools for instructional delivery. This is because some powerful AI tools come with subscription fees or licensing costs that are cost intensive and are not easily affordable by teachers or their institutions. Meanwhile, there are issues relating to over-reliance on AI which may stand to suppress teachers' own creativity and intuition, which might lead to a mechanical teaching approach rather than a human-cantered (UNESCO, 2022; Oke & Akintunde, 2023). According

to the findings of European Commission (2023) their study revealed that teachers had consistently express concerns about teachers using AI tools that collect student data but clear guidelines on data protection are not given due concern which has raised ethical and security issues. On the challenges, Zhang and Aslan (2023) found that many teachers see AI as a threat to their professional roles, thereby causing anxiety, fear, resistance, or skepticism about its practical adoption.

Going by the findings of Pane, (2017), it was revealed that, without structured professional development programmes, institutional encouragement or mentorship, teachers may find it difficult to implement AI creative tool for instructional delivery. Some works in EdTech Hub (2023) revealed that most AI tools are designed for global markets and may not align with local curricula or pedagogical contexts. Such outright misalignment could limit their relevance and usability for Nigerian teachers in the application of such tools. A major challenge that is associated with the application of AI tools is poor access to computers, stable electricity, and reliable internet services in many schools which makes it difficult for teachers to utilize AI tools consistently and effectively. Therefore, lack of devices, connectivity, and in-school infrastructure hinder broad adoption of AI tool by teachers.

The work of Oke and Akintunde (2023) revealed that many teachers do not possess technical skills and conceptual understanding of how AI tools function and how they can be creatively applied in teaching. This creates resistance or ineffective usage of these tools. Zhang and Aslan (2023) found that, some teachers perceive AI as a threat to their professional roles, leading to fear, resistance, or skepticism about its adoption, especially if institutional communication is lacking.

Statement of the Problem

Despite the growing potential of Artificial Intelligence (AI) tools to transform teaching and learning, their application in public secondary schools in Rivers State remains limited. While some teachers attempt to integrate AI-driven platforms for lesson planning, assessment, and interactive learning, the extent to which these tools foster creative instructional delivery is still unclear. Moreover, teachers face peculiar challenges such as inadequate digital skills, lack of access to devices and internet connectivity, and insufficient institutional support, which hinder the effective use of AI in promoting innovative teaching practices. This raises concern about the readiness of public secondary schools in Rivers State to harness AI for enhancing teachers' creativity and improving instructional outcomes.

Aim and Objectives of the Study

The study investigated application of artificial intelligence tools on teachers' creative instructional practices in public secondary schools in Rivers State. The study addressed the following objectives:

1. To examine AI tools utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State.
2. To assess the extent the use of AI tools influence teachers' creative approaches to instructional delivery in public secondary schools in Rivers State.
3. Find out the challenges teachers face in the application of AI tools to enhance their creative instructional practices in public secondary schools in Rivers State.

Research Questions

1. What AI tools are currently utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State?
2. To what extent does the use of AI tools influence teachers' creative approaches to instructional delivery in public secondary schools in Rivers State?
3. What are the challenges teachers face in the application of AI tools to enhance their creative instructional practices in Public Secondary Schools in Rivers State?

Hypotheses

1. **Ho_1:** There is no significant difference between the mean scores of teachers in rural and urban areas on AI tools currently utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State?
2. **Ho_2:** There is no significant difference between the mean scores of experienced teachers and less experienced teachers on the extent the use of AI tools influences their creative approaches to instructional delivery in public secondary schools in Rivers State.
3. **Ho_3:** There is no significant difference between the mean scores of teachers in rural and urban areas on the challenges teachers face in the application of AI tools to enhance their creative instructional practices in public secondary schools in Rivers State.

Methodology

The descriptive survey research design was used for this study. The population of the study consisted of all the 290 public secondary schools in Rivers State with a population of 6,893 teachers in these schools. A sample size of 689 teachers in the rural and urban areas representing 10% of the population served as respondents. The multi stage sampling technique was employed. In doing this, the state was stratified into urban and rural areas and in each of the schools located in the urban and rural areas, 10% of the schools were selected. Furthermore, in each of the schools selected, 10% of the teachers were selected as stratum using simple random sampling technique. The instrument that was used for data collection was a 15-item questionnaire titled: "Application of Artificial Intelligence Tools on Teachers' Creative Instructional Practices Questionnaire" (AAITTCIPQ) was used. Out of the 689 copies of the questionnaires administered, only copies were retrieved which was used for analysis, making it 73% retrieval rate.

The criterion mean of 2.50 was used as the bench mark for agreeing or disagreeing to responses in the mean calculations. 4- points modified likert rating scale of Strongly Agree (SA) = 4 points; Agree (A) = 3 points; Disagree (D) = 2 points; and Strongly Disagree (SD) = 1 point) was used. Test-retest was used to obtain a reliability coefficient of 0.75. Mean scores and standard deviation were used to answer the research questions, while the z-test statistics was used to test the hypotheses at 0.05 level of significance.

Results and Discussion

Research Question 1: What AI tools are currently utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State?

Table 1: Mean and Standard Deviation Analysis of Teachers in Rural and Urban Areas on AI Tools Currently Utilized by Teachers that Enhances their Creative Instructional Practices in Public Secondary Schools in Rivers State.

S/N	Items	Teachers in Rural (244)		Teachers in Urban (366)			
		$\overline{X}$	SD	$\overline{X}$	SD	$\bar{X}_1\bar{X}_2$	Remark
1	I utilize adaptive learning platforms to tailor instructional content and pace according to individual learning styles	1.89	1.27	2.01	1.22	1.95	Disagreed
2	I utilize generative AI tools to design lesson plans, assessments, presentations, and educational materials	1.99	1.23	2.02	1.23	2.01	Disagreed
3	I utilize AI-powered assessment tools to automate test creation, grade papers and provide instant feedback	1.60	1.37	2.13	1.19	1.87	Disagreed
4	I utilize AI speech, language and accessibility tools to help students with disabilities or language challenges	2.13	1.19	2.5	1.82	2.32	Disagreed

5	I utilize predictive analytics tools to help track student progress and predict performance for early intervention	2.02	1.23	2.12	1.18	2.07	Disagreed
Average mean/standard deviation		**1.93**	**1.26**	**2.16**	**1.33**		

Table 1 indicated that item number all the items had mean scores below the criterion mean of 2.50. This clearly indicated that, teachers do not currently utilize adaptive learning platforms to tailor instructional content and pace according to individual learning styles, they do not utilize generative AI tools to design lesson plans, assessments, presentations, they do not utilize AI-powered assessment tools to automate test creation, grade papers, they do not utilize AI speech, language and accessibility tools to help students with disabilities or language challenges, they do not also utilize predictive analytics tools to help track student progress and predict performance for early intervention.

Research Question 2: To what extent does the use of AI tools influence teachers' creative approaches to instructional delivery in public secondary schools in Rivers State?

Table 2: Mean and Standard Deviation Analysis of Experienced Teachers and Less Experienced Teachers on the Extent the Use of AI Tools Influences their Creative Approaches to Instructional Delivery in Public Secondary Schools in Rivers State.

S/N	**Items**	**Experienced Teachers (427)**		**Less Experienced Teachers (183)**			
		$\overline{X}$	**SD**	$\overline{X}$	**SD**	$\bar{X}_1\bar{X}_2$	**Remark**
1	Application of AI influences teachers to be creatively incline in tailoring instructional content to meet the diverse needs of learners	3.22	1.33	3.72	1.25	3.47	**Agreed**
2	Application of AI enhances teachers crafting engaging and effective learning experiences	3.60	1.57	3.46	1.39	3.53	**Agreed**
3	Teachers' utilization of AI tools gives them more time to focus on designing innovative lessons	2.91	1.14	2.80	1.16	2.90	**Agreed**
4	Application of AI tools support teachers in creating highly engaging teaching materials	3.42	1.45	3.38	1.43	3.4	**Agreed**
5	Application of AI tools influences teachers by identifying learning gaps and redesign lessons were necessary	3.32	1.38	3.39	1.43	3.36	**Agreed**
Average mean/standard deviation		**3.29**	**1.37**	**3.35**	**1.33**		

Table 2 indicated that items 1-5 had mean scores above 2.50 criterion mean. This implies that, application of AI tools enhances teacher's crafting engaging and effective learning experiences, it influences teachers to be creatively incline in tailoring instructional content to meet the diverse needs of learners, teachers' utilization of AI tools gives them more time to focus on designing innovative lessons, application of AI tools support teachers in creating highly engaging teaching materials and also influences teachers by identifying learning gaps and redesign lessons were necessary.

Research Question 3: What are the challenges teachers face in the application of AI tools to enhance their creative instructional practices in Public Secondary Schools in Rivers State?

Table 3: Mean and Standard Deviation Analysis of Teachers in Rural and Urban Areas on the Challenges Teachers face in the Application of AI Tools to Enhance their Creative Instructional Practices in Public Secondary Schools in Rivers State.

S/N	Items	Teachers in Rural (244)		Teachers in Urban (366)			
		$\overline{X}$	SD	$\overline{X}$	SD	$\bar{X}_1\bar{X}_2$	Remark
1	Many teachers see AI as a threat to their professional roles, thereby causing anxiety, fear, resistance about its practical adoption.	3.01	1.23	3.19	1.31	3.1	Agreed
2	Most AI tools are designed for global markets which may not align with local curricula or pedagogical contexts which limit their relevance for Nigerian teachers to apply such tools	1.99	1.22	1.94	1.25	1.97	Disagreed
3	Poor access to computers coupled with unreliable internet services in many schools makes it difficult for teachers to utilize AI tools	2.5	1.82	2.60	1.22	2.55	Agreed
4	unstable electricity supply makes it difficult for teachers to develop attitude towards application of electronic tools in teaching	3.07	1.26	2.68	1.13	2.88	Agreed
5	Lack of required infrastructures/facilities hinder broad adoption of AI tool by teachers	3.12	1.28	2.60	1.22	2.86	Agreed
Average mean/standard deviation		**2.74**	**1.36**	**2.60**	**1.23**		

Table 3 indicated that items 1, 3, 4 and had mean score above the criterion mean of 2.50 except item 2 which is below the criterion mean. This clearly indicated that, the challenges teachers face in the application of AI tools to enhance their creative instructional practices is that, many teachers see AI as a threat to their professional roles, thereby causing anxiety, fear, resistance about its practical adoption, poor access to computers coupled with unreliable internet services in many schools makes it difficult for teachers to utilize AI tools, unstable electricity supply which makes it difficult for teachers to develop attitude towards application of electronic tools in teaching, lack of required infrastructures/facilities hinder broad adoption of AI tool by teachers. Nevertheless, teachers in both rural and urban areas do not consent to the fact that, most AI tools are designed for global markets which may not align with local curricula or pedagogical contexts which limit their relevance and usability for Nigerian teachers to apply such tools.

Test of Hypotheses

H_{O1}: There is no significant difference between the mean scores of teachers in rural and urban areas on AI tools currently utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State?

Table 4: z-test Analysis of the Difference between the Opinions of Rural and Urban Areas on AI Tools Currently Utilized by Teachers that Enhances their Creative Instructional Practices in Public Secondary Schools in Rivers State.

Subject	N	$\bar{x}$	SD	Df	z-cal.	z-crit.	Level of Sig	Remark
Teachers in Rural	244	1.93	1.26	2 608	-0.28	±1.96	0.05	Accepted
Teachers in Urban	366	2.16	1.33					

The result of table 4 shows that the z-calculated value of -0.28 is less than the z-critical value of 1.96 at degree of freedom of 608 at 0.05 level of significance. Therefore, the null hypothesis is accepted and upholds that, there is no significant difference between the mean scores of teachers in rural and urban areas on AI tools currently utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State.

Ho_2: There is no significant difference between the mean scores of teachers in rural and urban areas on AI tools currently utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State?

Table 5: z-test Analysis of the Difference between the Opinions of Rural and Urban Areas on AI Tools Currently Utilized by Teachers that Enhances their Creative Instructional Practices in Public Secondary Schools in Rivers State.

Subject	N	$\bar{x}$	SD	Df	z-cal.	z-crit.	Level of Sig	Remark
Experienced Teachers	427	3.37	1.37	2 608	-0.51	±1.96	0.05	Accepted
Less Experienced Teachers	183	3.35	1.33					

The result of table 5 shows that the z-calculated value of -0.51 is less than the z-critical value of 1.96 at degree of freedom of 608 at 0.05 level of significance. Therefore, the null hypothesis is accepted and upholds that, there is no significant difference between the mean scores of teachers in rural and urban areas on AI tools currently utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State.

Ho_3: There is no significant difference between the mean scores of teachers in rural and urban areas on AI tools currently utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State?

Table 6: z-test Analysis of the Difference between the Opinions of Rural and Urban Areas on AI Tools Currently Utilized by Teachers that Enhances their Creative Instructional Practices in Public Secondary Schools in Rivers State.

Subject	N	$\bar{x}$	SD	Df	z-cal.	z-crit.	Level of Sig	Remark
Teachers in Rural	244	2.74	1.36	2 608	1.38	±1.96	0.05	Accepted
Teachers in Urban	366	2.60	1.23					

The result of table 6 shows that the z-calculated value of 1.38 is less than the z-critical value of 1.96 at degree of freedom of 608 at 0.05 level of significance. Therefore, the null hypothesis is accepted and upholds that, there is no significant difference between the mean scores of teachers in rural and urban areas on AI tools currently utilized by teachers that enhances their creative instructional practices in public secondary schools in Rivers State.

Summary of Findings

It was found that, teachers do not currently utilize adaptive learning platforms to tailor instructional content, they do not utilize generative AI tools to design lesson plans/ assessments, they do not utilize AI-powered assessment tools to automate test creation, grade papers, they do not utilize AI speech, language and accessibility tools to help students with disabilities or language challenges and they do not also utilize predictive analytics tools to help track student progress and predict performance for early intervention.

It was also found that, application of AI tools enhances teacher's crafting engaging and effective learning experiences, it influences teachers to be creatively incline in tailoring instructional content to meet the diverse needs of learners, application of AI tools support teachers in creating highly engaging teaching materials and also influences teachers by identifying learning gaps and redesign lessons were necessary. It was also found that, the challenges teachers face in the application of AI tools to enhance their creative instructional practices is that, many teachers see AI as a threat to their professional roles, poor access to computers coupled with unreliable internet services, unstable electricity supply and lack of required infrastructures/facilities.

Discussion of Findings

This first finding does not corroborate with the findings of Pane et al. (2017) whose work revealed that adaptive learning platforms are used by teachers to analyse student data to tailor instructional content and pace according to individual learning styles. This finding is not also in consonance with the findings of Woolf (2021) whose findings revealed that, teachers who have the knowledge or trained to utilize these AI tools uses them to grade papers using handwriting recognition, design quizzes and provide instant feedback.

The second findings is in consonance with the findings of EdWeek (2024) whose study revealed that, AI-driven adaptive learning tools practically and systematically drive teachers to customize instruction to encourage creative curriculum planning to suit varying student abilities and teachers with the knowledge and application of AI driven tools are influences to be conversant with automating grading, attendance, and other administrative duties. This is in line with Futurity (2024) whose study revealed that AI tools influences and support teachers in creating highly engaging and diverse teaching materials that cater to multiple learning styles making teachers to adjust their methods creatively in real time, especially using tools like Edmodo, Quizizz AI, and Google Classroom.

Finally, the third findings supported the findings of Zhang and Aslan (2023) who found that many teachers see AI as a threat to their professional roles, thereby causing anxiety, fear, resistance, or skepticism about its practical adoption. This is in consonance with EdTech Hub (2023) whose work revealed that most AI tools are designed for global markets and may not align with local curricula or pedagogical contexts. Such outright misalignment could limit their relevance and usability for Nigerian teachers in the application of such tools.

Conclusion

The study established that although teachers in public secondary schools in Rivers State are aware of some Artificial Intelligence (AI) tools such as digital content creation platforms, adaptive learning systems, and assessment tools, their use remains at a modest level. Findings revealed that the extent to which AI tools influence teachers' creative instructional delivery is significant but underutilized due to challenges such as inadequate infrastructure, poor digital literacy, and limited institutional support. Hence, while AI has the potential to enhance creativity in lesson planning and delivery, its full benefits are yet to be realized in the study context.

Recommendations

1. Capacity Building and Training: Regular professional development programmes should be organized to improve teachers' digital literacy and competence in using AI tools creatively for instructional delivery.

2. Provision of Infrastructure and Resources: Government and stakeholders should invest in ICT infrastructure, stable internet connectivity, and adequate digital devices to enable teachers to effectively integrate AI into teaching practices.
3. Policy and Institutional Support: Education authorities should develop clear policies that promote AI adoption in schools, alongside creating incentives and support systems that encourage teachers to embrace AI-driven creative instructional practices.

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