



AWARENESS AND USABILITY OF ARTIFICIAL INTELLIGENCE IN TEACHING CIVIC EDUCATION IN SENIOR SECONDARY SCHOOLS IN KWARA STATE, NIGERIA

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Abstract

Understanding the integration of Artificial Intelligence (AI) in teaching senior secondary school Civic Education in Kwara State, Nigeria, is crucial due to AI's increasing potential to enhance educational practices. This study examined the AI tools Civic Education teachers are aware of and use, the challenges they face in utilizing AI, and the differences in these challenges based on school type and years of teaching experience. Descriptive research was adopted, utilizing a questionnaire titled "Awareness and Usability of Artificial Intelligence in Teaching Senior Secondary School Civic Education Questionnaire," administered to 180 Civic Education teachers from 72 schools in Kwara State. Descriptive data analysis techniques were used to summarize and interpret the data. The findings reveal that WhatsApp Meta AI, Google Assistant and ChatGPT were the most recognized tool, However, awareness was significantly lower for tools like Perplexity.ai, Jasper AI, and Llama 3 by Meta. ChatGPT, WhatsApp Meta AI, and Google Assistant were identified as the most usable AI tools for Civic Education teachers. The main challenges faced by Civic Education teachers included high internet connectivity costs, limited AI tool selection, time constraints for learning AI tools, lack of awareness among school administrators, non-user-friendly features, difficulty in finding quality content, and insufficient training and support. Recommendations include increasing investment in educational technology to ensure all schools have access to necessary AI tools and resources. Professional development programs should be established to train teachers in the effective use of AI in the classroom.



Policy reforms are essential to support AI adoption, focusing on creating a conducive environment for AI integration in schools. Tailored training programs based on teachers' experience levels and school-specific strategies should be developed. Awareness campaigns for lesser-known AI tools and enhanced support systems for teachers are also crucial.

Keywords: Awareness, usability, artificial intelligence, civic education

Introduction

The evolution of education has been intricately intertwined with technological advancements, with each wave of innovation opening new horizons for teaching and learning. From the advent of the printing press to the proliferation of digital devices, technology has continually revolutionized the way knowledge is disseminated and acquired. In recent decades, the rise of AI technologies has ushered in a new era of educational possibilities, offering unprecedented opportunities for customization, personalization, and efficiency in the learning process (Okeke, 2019). Within the Nigerian educational context, senior secondary school education serves as a critical juncture in preparing students for higher education and the workforce.

Senior Secondary School Civic Education curriculum plays a pivotal role in equipping students with foundational knowledge and skills relevant to understanding economic principles, analyzing socio-economic phenomena, and making informed decisions as future citizens and professionals. Despite the significance of Civic Education, teachers face numerous challenges in delivering high-quality instruction that resonates with students and fosters meaningful learning outcomes. In Kwara State, as in many regions across Nigeria, limited resources, overcrowded classrooms, and outdated instructional materials pose barriers to effective teaching and learning. Moreover, the traditional pedagogical approaches employed in Civic Education often struggle to engage students and bridge the gap between theoretical concepts and real-world applications (Okunade, 2024).

The integration of AI technologies holds immense promise for revitalizing Civic Education in senior secondary schools. By leveraging AI-powered tools and platforms, teachers can tailor instructional content to suit individual learning preferences, pace, and aptitudes. Adaptive learning systems, for instance, dynamically adjust the difficulty and sequencing of learning activities based on students' performance and comprehension levels, thereby promoting personalized learning experiences. Furthermore, AI-driven analytics afford teachers valuable insights into students' learning progress, enabling timely intervention and targeted support where needed. Real-time feedback mechanisms, facilitated by AI



algorithms, empower both teachers and students to monitor learning outcomes, identify areas for improvement, and iteratively refine instructional strategies. Additionally, AI-enabled assessment tools offer the potential to streamline grading processes, mitigate bias, and enhance the objectivity and reliability of evaluation methods (Avik, 2018).

Despite the growing enthusiasm surrounding the application of AI in education, empirical research specific to its implementation in senior secondary school Civic Education in Kwara State, Nigeria, remains sparse. While existing studies such as Okeke, (2019); Aina et al, (2023) and Chang et al. (2023) have explored broader aspects of AI integration in education, such as its impact on learning outcomes or teacher professional development, few have delved into the contextual nuances and practical considerations relevant to the Nigerian educational context. Education is undergoing a rapid and transformative journey, propelled by the relentless advancement of Artificial Intelligence (AI). Within this dynamic landscape, AI tools like ChatGPT, a large language model developed by OpenAI, hold immense potential to revolutionize traditional teaching and learning paradigms. ChatGPT possesses an array of capabilities beyond mere text generation; it can translate languages, answer questions in an informative manner, personalize learning pathways, and generate interactive content, opening doors for its application in diverse educational settings. The implementation of AI in education is not without its challenges. While nations with robust infrastructure and abundant resources may readily embrace these advancements, resource-constrained contexts like Nigeria require specific attention and tailored approaches. This research investigated the applicability of ChatGPT in senior secondary school Civic Education within Kwara State, Nigeria, specifically focusing on its usability, accessibility, perceived benefits and challenges, and teacher perceptions and preparedness for integration (Aina, & Ogundipe, 2023).

Artificial intellect (AI) is an innovative technical framework that encompasses the creation of computer systems with the ability to execute activities that usually need human intellect (Aina, 2023). These activities involve problem-solving, acquiring knowledge, comprehending language, and seeing visual information. AI has become increasingly prominent in recent years, bringing about a revolutionary transformation in the methods by which jobs are completed in numerous businesses. Within the realm of education, artificial intelligence (AI) offers a multitude of possibilities to augment the learning process. Intelligent systems provide the ability to adjust to the specific requirements of each learner, deliver tailored learning experiences, and provide immediate feedback (Aina, 2023). AI applications in education encompass adaptive learning platforms, intelligent tutoring systems, and virtual simulations. Through the use of artificial intelligence, teachers have the ability to construct dynamic and interactive learning environments that



accommodate the various learning styles and capabilities of students. The convergence of AI and education presents significant opportunities for tackling the obstacles encountered by the Nigerian educational system. The use of AI tools in secondary school classrooms has the potential to fundamentally transform the methods of teaching and learning, hence enhancing accessibility, engagement, and effectiveness of education.

AI, like any other tool, offers many opportunities but also carries with it many threats, which make it necessary to take human rights principles into account in the early design of its application. Teachers must be aware of the strengths and weaknesses of AI in learning and teaching, so as to be empowered – not overpowered – by technology in digital citizenship education practices. AI tools like ChatGPT emerge as potential catalysts for positive change. By leveraging its unique capabilities, ChatGPT could address several of the aforementioned challenges and enhance the quality of teaching and learning senior secondary school Civic Education. Beyond directly benefiting students, ChatGPT can also support teachers and alleviate their workload by freeing up time for more personalized interactions and instruction (Chang & Kuo, 2020). Providing personalized recommendations for learning activities and resources based on student data and performance (Chen et al., 2023). Offering real-time language support for students unfamiliar with English, fostering inclusivity and participation (Liu, 2023).

Limited access to reliable internet connectivity and technology devices in classrooms and homes could hinder widespread adoption of ChatGPT. Affordability of the technology and potential subscription fees could further limit awareness for schools and individual students (Kachra & Sharma, 2020). Artificial Intelligence may require specific technical skills or knowledge that teachers may not readily possess, necessitating training and support (Miao et al., 2023). Successfully integrating AI into existing curriculum and teaching practices requires teachers to possess strong pedagogical skills and adapt their instructional methods. AI offers a wealth of potential benefits for senior secondary Civic Education. By understanding its capabilities, acknowledging its challenges, and implementing it strategically, teachers can create engaging learning experiences, personalize instruction, and empower students to develop critical thinking skills, data analysis abilities, and a deeper understanding of the economic world. It's essential to remember that AI is a tool to be used effectively, not a replacement for traditional teaching methods, and continuous monitoring, evaluation, and adaptation is crucial for maximizing its positive impact on the learning process.

Awareness of AI tools among Civic Education teachers is closely tied to the digital literacy programs available in Kwara State. Initiatives like KwaraLEARN have provided devices and structured training to thousands of teachers to improve



pedagogical practices. However, the focus has been more on general digital tools rather than specific AI applications such as generative AI, adaptive learning platforms, or civic engagement simulations. This limited exposure may result in low awareness of AI tools explicitly suited for civic education (KwaraLEARN, 2023; Adeosun, 2023). Globally, tools such as AI-based discussion forums, data analysis platforms, and chatbots for student engagement are being adopted in education. These tools can support civic education by fostering critical thinking and discussion of societal issues, but local awareness in Kwara remains constrained by the scope of existing teacher training programs (World Economic Forum, 2023; Lu, 2024). AI tools that can aid Civic Education include simulation platforms for role-playing democratic processes, generative AI for creating civic-related content, and tools for analyzing political and economic trends. While KwaraLEARN emphasizes structured pedagogy and use of tablets, the direct usability of advanced AI tools for teaching civic concepts has not been extensively explored in Kwara's context (KwaraLEARN, 2023). Teachers in more digitally advanced settings leverage AI tools such as debate simulators and AI tutoring systems to provide personalized civic learning experiences. However, the integration of these tools in Kwara is limited by both access and training deficits (Nantaburom, 2023; Lynch, 2018). Infrastructure Deficits: Teachers face unreliable electricity and internet connectivity, especially in rural areas, which hinders the use of AI tools (Adeosun, 2023; KwaraLEARN, 2023). There is a lack of comprehensive training on how to use AI tools specifically for Civic Education. Most training focuses on general technology use rather than specialized applications (World Economic Forum, 2023). High costs of AI tools and devices make their adoption challenging, despite government interventions (KwaraLEARN, 2023). Teachers express concerns about biases and misinformation that AI tools might perpetuate, which are critical in teaching civic values and principles (Lu, 2024; Leonard, 2023). Despite the immense potential of AI tools like ChatGPT to revolutionize education, their application in resource-constrained environments like Kwara State, Nigeria, faces critical challenges. While the promises of personalized learning, enhanced engagement, and teacher support through ChatGPT are alluring, significant gaps exist in our understanding of its awareness, Usability, and perceived benefits and challenges within the specific context of senior secondary school Civic Education in Kwara State. Limited research explores the awareness and usability of AI tools like ChatGPT in resource-constrained settings, leaving policymakers and teachers without crucial insights needed to inform effective implementation strategies. Teacher perceptions and preparedness regarding AI tools remain largely unexplored, creating potential barriers to successful integration if concerns and needs are not adequately addressed. Without addressing the awareness barriers, such as infrastructure limitations and affordability, the use of ChatGPT could



exacerbate existing educational inequalities, further disadvantaging students in resource-constrained communities. Policymakers and teachers lack the necessary knowledge to make informed decisions about integrating ChatGPT effectively, potentially leading to wasted resources and suboptimal outcomes. The responsible and ethical implementation of AI in education, particularly regarding data privacy, student agency, and potential biases, requires careful consideration but remains underexplored in this context. (Shobita, 2019).

Therefore, this research investigates the awareness and Usability of Artificial Intelligence in teaching senior secondary school Civic Education in Kwara State by focusing on teacher perceptions of AI awareness and Usability in their classrooms. It also examines the potential benefits and challenges associated with integrating AI into Civic Education and explores ways to address teacher concerns and enhance their preparedness for AI integration. By addressing these issues, this study aimed to bridge the knowledge gap, inform best practices, and contribute to a more equitable and effective integration of AI tools in resource-constrained educational settings like in Kwara State

Purpose of the Study

The main purpose of this study was to investigate the awareness and Usability of Artificial Intelligence in teaching senior secondary school Civic Education in Kwara State. Specifically, the study investigated:

1. artificial Intelligence tools that Civic Education teachers in senior secondary schools are aware of.
2. usable Artificial Intelligence tools for Civic Education teachers in senior secondary schools.
3. challenges facing the use of Artificial intelligence by Civic Education teachers in senior secondary schools.

Research Questions

The following research questions guided the investigation.

1. What AI tools are Civic Education teachers in senior secondary schools in Kwara State aware of?
2. Which AI tools are usable for Civic Education teachers in senior secondary schools in Kwara State?
3. What challenges do Civic Education teachers in senior secondary schools in Kwara State face when using AI?



Methodology

The study adopted descriptive research of the survey type, focusing on the population of Civic Education teachers in Kwara State. The descriptive survey method was chosen to examine the awareness and Usability of Artificial Intelligence among the teachers. This approach was particularly suited to gathering information about the characteristics, behaviors, opinions, or attitudes of a specific group of people. Descriptive surveys are designed to collect data that describes and summarizes existing conditions, opinions, or trends within a population. In this study, the descriptive survey aims to provide insights into the current state of AI awareness and usability among Civic Education teachers in senior secondary schools. The survey employs closed-ended questions, where respondents choose from predetermined response options. Closed-ended questions enabled efficient data collection and simplify the analysis process, allowing for the identification of trends and patterns in teachers' awareness and usage of AI tools. Using this approach, the study aimed at comprehensively understand the awareness and usability of AI in Civic Education in Kwara state.

The population for this study was all the senior secondary school Civic Education teachers in Kwara state. Kwara State is divided into three senatorial districts: kwara Central with five (5) Local Government Areas, Kwara North with four (4) Local Government Areas and Kwara South with seven (7) Local Government Areas. Simple random sampling technique was used to select five (5) Local Government Areas, in the three senatorial districts, which were Kwara Central (Ilorin East, Ilorin South), kwara North (Baruteen), kwara south (Ifelodun, Offa). Sixty-two (62) senior secondary schools were selected using Stratified random sampling technique. One hundred and eighty (180) teachers were selected using purposive sampling techniques from the schools

The major instrument for this study was a questionnaire designed by the researcher, titled "awareness and usability of artificial intelligence in teaching senior secondary school Civic Education in Kwara State, Nigeria." The questionnaire was divided into two sections: A and B. Section A focused on teachers' demographical information. This section gathered data about respondents' school type and years of teaching experience.

Section B addressed items related to AI tools Civic Education teachers in senior secondary schools were aware of and could use. This section aimed to determine the level of awareness teachers have about different AI tools available for educational purposes and their Usability. Also identified the challenges faced by Civic Education teachers in using AI tools. This section explored the various obstacles that hinder the effective integration of AI in Civic Education, such as



technical difficulties, lack of training, or resistance to change. Each section included a series of statements with a Likert weighted scaling of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD), Aware (A), Not Aware (NA), Usable (U), Not Usable (NU) allowing respondents to express their level of agreement with each statement. This format facilitated the collection of quantitative data that were analyzed to identify trends and patterns in the awareness and usability of AI tools among senior secondary school Civic Education teachers in Kwara State.

In this study, data collected from 180 Civic Education teachers across 62 schools in Kwara State were analyzed using both descriptive statistics. Descriptive statistics, including mean, standard deviation, and percentage, were employed to summarize the data and provide insights into the overall awareness and usage levels of AI tools among the teachers. The mean offered an average measure, the standard deviation indicated the variability of responses, and percentages illustrated the distribution across different categories. For hypothesis testing and exploring difference between variables, T-test was utilized to examine the difference between the challenges faced in using AI and factors such as school type and years of teaching experience. This comprehensive approach provided a clear summary of key trends and allowed for the investigation of specific relationships within the data.

Results

Three research research questions were raised in the study. Research questions 1 to 3 were answered using mean and standard deviation while research questions 4 and 5 that have corresponding hypotheses were tested using the Pearson correlation coefficient at 0.05 level of significance.

Research Question One: What AI tools are Civic Education teachers in senior secondary schools in Kwara State aware of?

Table 1 represents the awareness of Civic Education teachers in senior secondary schools in Kwara State regarding various AI tools is detailed in. Among the AI tools surveyed, ChatGPT emerges as the most recognized, with 110 respondents (61.1%) indicating awareness, compared to 70 respondents (38.9%) who were not aware. The mean rating for ChatGPT is 1.3889, with a standard deviation of 0.48886, suggesting a moderate level of awareness. Similarly, Google Assistant shows notable awareness, with 121 respondents (67.2%) aware and 59 respondents (32.8%) not aware, yielding a mean rating of 1.3278 and a standard deviation of 0.47071. Conversely, tools like Google Gemini and Perplexity.ai exhibit lower awareness levels, with only 20.0% and 1.7% of respondents aware, respectively. WhatsApp Meta AI stands out with 93.3% awareness among respondents,



indicating a high level of familiarity. These findings highlight varying levels of awareness among Civic Education teachers regarding different AI tools, essential for understanding the readiness and potential adoption of AI in educational settings in Kwara State.

Table 1:*Mean Rating and Standard Deviation Showing Awareness of various AI Tools*

SN	AI Tools	Mean	Standard Deviation	Remark
1.	ChatGPT	1.38	0.48	A
2.	Google Gemini	1.80	0.40	NA
3.	WhatsApp meta-AI	1.06	0.25	A
4.	Snapchat AI chatbot	1.93	0.25	NA
5.	Microsoft copilot	1.88	0.32	NA
6.	Play ground	1.95	0.21	NA
7.	Perplexity.ai	1.98	0.12	NA
8.	Google Assistant	1.32	0.47	A
9.	Liama 3 by Meta	1.94	0.22	NA
10	Jasper AI	1.96	0.18	NA

Sources: Field Survey, 2024

Research Question Two: Which AI tools are usable for Civic Education teachers in senior secondary schools in Kwara State?

Table 2 represents the usability of various AI tools for Civic Education teachers in senior secondary schools in Kwara State is presented in. The study shows that, ChatGPT is considered usable by 110 respondents (61.1%), while 70 respondents (38.9%) do not find it usable. The mean rating for ChatGPT is 1.3889 with a standard deviation of 0.48886, indicating a moderate level of usability among teachers. Similarly, Google Assistant is deemed usable by 144 respondents (63.3%)



and not usable by 66 respondents (36.7%), with a mean rating of 1.3667 and a standard deviation of 0.48324, showing significant usability. WhatsApp Meta AI stands out as the most usable tool, with 156 respondents (86.7%) finding it useful and only 24 respondents (13.4%) not finding it usable. This is reflected in its mean rating of 1.1333 and standard deviation of 0.34088, indicating a high level of usability. On the other hand, tools like Google Gemini, Microsoft Copilot, Playground, Perplexity.ai, Llama 3 by Meta, and Jasper AI show low usability. For instance, Google Gemini is usable by only 39 respondents (21.7%) and not usable by 141 respondents (78.3%), with a mean rating of 1.7833 and standard deviation of 0.41312.

Table 2:*Mean Rating and Standard Deviation of Usability Showing various AI Tools*

SN.	Descriptive Statistics	Mean	Standard Deviation	Remark
1.	ChatGPT	1.38	0.48	U
2.	Google Gemini	1.78	0.41	NU
3.	WhatsApp meta-AI	1.13	0.34	U
4.	Snapchat AI chatbot	1.96	0.18	NU
5.	Microsoft copilot	1.90	0.30	NU
6.	Play ground	1.95	0.21	NU
7.	Perplexity.ai	1.98	0.12	NU
8.	Google Assistant	1.36	0.48	U
9.	Llama 3 by Meta	1.93	0.24	NU
10	Jasper AI	1.98	0.12	NU

Sources: Field Survey, 2024

Research Question Three: What challenges do Civic Education teachers in senior secondary schools' face when using AI?

Table 3 provides insights into the various challenges faced by Civic Education teachers in senior secondary schools in Kwara State when using AI tools. The data is presented with frequencies, percentages, mean ratings, and standard deviations



for each statement. One significant barrier identified is the high cost of subscribing to AI tools, with 2.2% of respondents strongly agreeing, 12.2% agreeing, while a majority, 57.8%, disagreeing, and 27.8% strongly disagreeing. The mean rating is 3.1111, with a standard deviation of 0.69225, indicating that most teachers do not consider cost a significant barrier.

The user interface (UI) of AI tools presents another challenge, with 11.1% of respondents strongly agreeing that it is easy to navigate, 33.9% agreeing, 46.1% disagreeing, and 8.9% strongly disagreeing. The mean rating is 2.5278 with a standard deviation of 0.80799, showing that many teachers find the UI challenging to navigate. Availability of devices such as computers and tablets are also a concern, as 25.6% strongly agree that their school has the necessary devices, 28.3% agree, 42.2% disagree, and 3.9% strongly disagree. The mean rating is 2.2444 with a standard deviation of 0.88199, indicating a lack of sufficient devices. High internet connectivity costs are a significant barrier, with 37.8% strongly agreeing and 40.6% agreeing. Only 17.8% disagree and 3.9% strongly disagree, resulting in a mean rating of 1.8778 and a standard deviation of 0.83670.

This suggests that internet costs are a substantial challenge. The current selection of AI tools for Civic Education is perceived as limited by 40.6% of respondents strongly agreeing and 41.1% agreeing. Only 16.7% disagree and 1.7% strongly disagree. The mean rating is 1.7944 with a standard deviation of 0.77458, indicating a consensus on the limited availability of suitable AI tools. Time commitment to learn and integrate AI tools is another barrier, with 30.6% strongly agreeing and 32.2% agreeing. About 31.7% disagree and 5.6% strongly disagree. The mean rating is 2.1222 with a standard deviation of 0.91331, showing that time constraints are a significant issue. Lack of awareness among school administrators about AI's potential in Civic Education is noted, with 20.0% strongly agreeing and 44.4% agreeing. About 22.2% disagree and 13.3% strongly disagree, leading to a mean rating of 2.2889 with a standard deviation of 0.93647.

The user-friendliness of AI tools is also a concern, as 30.0% strongly agree and 40.0% agree that features are not user-friendly. About 22.8% disagree and 7.2% strongly disagree, with a mean rating of 2.0722 and a standard deviation of 0.90332. Finding AI tools that offer high-quality and accurate economic content is challenging, with 39.4% strongly agreeing and 53.9% agreeing. Only 3.3% disagree and 3.3% strongly disagree, resulting in a mean rating of 1.7056 with a standard deviation of 0.69070. Finally, lack of training and support for teachers is the most significant challenge, with 47.8% strongly agreeing and 46.7% agreeing. Only 3.9% disagree and 1.7% strongly disagree. The mean rating is 1.5944 with a standard deviation of 0.64900, highlighting a critical area for improvement.

**Table 3:**

Mean Rating and Standard Deviation Showing Various Challenges Faced by Respondents when using AI Tools

SN. Challenges	Mean	Standard Deviation	Remark
1. The cost of subscribing to AI tools is a significant barrier to using them in my Economic class	3.11	0.69	D
2. The user interface (UI) of most AI tools for Civic Education is easy to navigate for both teachers and student	2.52	0.80	D
3. My school has the devices e.g., computers, tablet(s) for all students to access AI tools in Civic Education classes	2.24	0.88	D
4. The high cost of internet connectivity in my area makes using AI tools in Civic Education classes impractical	1.87	0.83	A
5. The current selection of AI tools for Civic Education is limited	1.79	0.77	A
6. The time commitment required to learn and integrate AI tools into existing Civic Education Curriculum is a significant barrier	2.12	0.91	A
7. There is a lack of awareness among school administrators about the potential of AI in Civic Education	2.28	0.93	A
8. The features of most AI tools for Civic Education are not user-friendly for teachers	2.07	0.90	A

Sources: Field Survey, 2024



9. Finding AI tools that offer high quality and accurate economic content relevant to the senior secondary curriculum is a challenge	1.70	0.69	A
10. Lack of training and support for teachers hinders the effective use of AI tool in senior secondary Civic Education	1.59	0.64	SA

Discussion of the Findings

The findings reveal that WhatsApp Meta AI is the most recognized AI tool among Civic Education teachers in senior secondary schools in Kwara State, with an impressive of respondents aware of it. This high recognition rate can be attributed to the widespread use of WhatsApp as a communication tool, making its AI features more accessible and familiar to educators. Following WhatsApp Meta AI, Google Assistant and ChatGPT are also well-recognized, indicating that these tools have made significant inroads into educational settings. In contrast, awareness of other AI tools like Perplexity.ai, Jasper AI, and Llama 3 by Meta is considerably lower. This discrepancy could be due to these tools being relatively newer or less marketed towards the education sector. Highlighting that widely used communication platforms with integrated AI, such as WhatsApp and Google Assistant, tend to have higher recognition rates among educators Okeke, (2019) and Liu, (2023). The familiarity and ease of access to these tools facilitate their awareness and adoption in educational contexts.

The usability analysis indicates that ChatGPT, WhatsApp Meta AI, and Google Assistant are the most used AI tools by Civic Education teachers. These tools' popularity can be attributed to their user-friendly interfaces, versatility, and ability to assist with a wide range of educational tasks, from answering queries to managing schedules and providing personalized learning experiences. The effectiveness of these tools in enhancing teaching methods and student engagement likely contributes to their high usability ratings among teachers. The usability of AI tools like ChatGPT and Google Assistant in educational settings is well-documented. Studies by Lynch (2018) and Aina and Ogundipe (2023) have shown that these tools significantly improve classroom interaction, resource accessibility, and administrative efficiency, which aligns with the high usability ratings reported in this study.



Civic Education teachers in Kwara State face several challenges in integrating AI tools into their teaching practices. The primary issues include high internet connectivity costs, limited selection of AI tools, time constraints for learning new tools, lack of awareness among school administrators, non-user-friendly features, difficulty in finding quality content, and insufficient training and support. These challenges hinder the effective use of AI and suggest the need for targeted interventions to address these barriers. Similar challenges have been highlighted in previous research. For instance, KwaraLEARN (2023) identified high internet costs and limited training as significant barriers to AI adoption in schools. Additionally, a study by Patel and Singh (2019) found that administrative support and user-friendly design are critical factors in the successful integration of AI in education, underscoring the need for comprehensive training programs and infrastructure development.

Conclusion

The study concluded that while there is a high level of awareness and perceived usability of certain AI tools among Civic Education teachers, several significant barriers hinder their effective integration into teaching. These barriers include high internet costs, limited tool availability, substantial time required for tool mastery, and a lack of adequate training and support for teachers. Addressing these challenges is crucial for enhancing the adoption and effective use of AI tools in Civic Education.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

1. Schools should invest in a wider range of AI tools beyond the commonly used ones like WhatsApp Meta AI, Google Assistant, and ChatGPT. Introducing educators to diverse AI applications can broaden their instructional methods and improve student engagement.
2. School administrators should be made aware of the benefits of AI in education. Awareness campaigns and informational sessions can help administrators understand the importance of supporting AI integration and providing necessary resources.
4. Policy makers and curriculum developers should collaborate with content creators and AI developers to ensure the availability of high-quality educational content that is relevant to the Civic Education curriculum.



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