The Impact of the Usage of Generative AI on Academic Engagement of Students: A Case Study at a College of Education in Ghana

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ABSTRACT

This study investigated the impact of generative AI usage on academic engagement among students at a selected College of Education in Ghana. The study aimed to examine the kinds of generative AI tools, identify the different ways students utilize these GenAI in their learning, and assess the overall influence on their academic engagement by employing a sequential explanatory mixed-methods design. This design was chosen to provide a comprehensive understanding through both quantitative and qualitative data.

Ninety-four students participated in the quantitative phase via purposive sampling and completed a survey examining the types of generative AI tools they use and the effects on their academic engagement. Additionally, twelve students were interviewed to gather in-depth qualitative insights that could not be captured by the survey.

Findings

Revealed that generative AI positively influences students' academic engagement and improves their learning environment. It serves as an effective tool to enhance learning and engagement. However, findings from some respondents via qualitative interview reveal that, excessive reliance on generative AI also poses risks by encouraging laziness and overdependence, less creativity and immersive engagement due to easy access to the AI tools, which may affect academic integrity.

The implication for this study is that generative AI tools like ChatGPT spark curiosity by offering instant feedback, tailored learning journeys, and interactive experiences that turn complex concepts into manageable insights.

The study highlights generative AI as a double-edged tool: while it empowers students with efficiency, creativity, and deeper engagement, it also risks encouraging shortcuts, dependency, and ethical breaches. Ensuring responsible and ethical integration of AI is therefore vital, with academic integrity anchored in fairness, honesty, and originality remaining at the heart of scholarly practice.

Keywords: Academic Engagement, Enhanced Learning, Generative AI, Laziness, Assistive learning

INTRODUCTION

Background

The use of Artificial Intelligence (AI) in education has attracted considerable attention in recent years, with researchers highlighting its transformative effects on teaching and learning (Okoye& Mante, 2024). AI-powered educational tools have been shown to increase student engagement, support personalized learning, and improve performance assessment (Okoye& Mante, 2024). Generative AI (GenAI), a branch of artificial intelligence that focuses on machine-generated content, has significant potential for delivering personalized and context-aware learning experiences, particularly in out-of-classroom settings (Nagender & Patil, 2017).

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Generative AI applies transformer-based deep learning architectures to produce novel content such as text, images, and audio, exemplified by tools like ChatGPT, Microsoft Copilot, and Canva (Lim et al., 2023). This technology enhances learning by providing immediate feedback, personalized learning pathways, and real-time practice, making the learning process more interactive and engaging (Ai, 2017). Moreover, GenAI systems are capable of producing human-like content across different modalities, from text and music to computer code, through deep learning and pattern recognition techniques (Baidoo-Anu & Owusu Ansah, 2023; Farrelly & Baker, 2023; Halaweh, 2023)

Globally, generative AI tools have been adopted in higher education, reshaping learning behaviors. Students perceive GenAI as an accessible tutor, available anytime, while institutions continue to grapple with challenges such as academic dishonesty (Liu et. al., 2024; Oravec, 2023). In some contexts, authorities have even banned ChatGPT, citing fears of plagiarism and reduced critical thinking (Estrellado, 2023; Johnson, 2023). Meanwhile, other studies have revealed the benefits of responsible use, such as improved writing, learning engagement, and personalized learning opportunities (Bulawan et.al., 2023; Lim et.al., 2023; Sok & Heng, 2023).

Statement of the Problem

AI has been demonstrated in numerous earlier researches to impact college teaching and learning significantly. Despite its growing influence, the use of Generative AI in education remains a double-edged sword (Hagendorff, 2020). While it enhances efficiency, engagement, and creativity, it also poses risks of overdependence, plagiarism, and reduced student initiative (Halaweh, 2023; Rodrigues et al., 2024). Within Ghana, particularly in Colleges of Education, students increasingly rely on tools like ChatGPT, Quillbot, and Grammarly for academic work (Bulawan et al., 2023). However, there is limited empirical evidence on how these tools affect student engagement in this context. The combination of student engagement and teacher readiness will drive more innovative and relevant Education in the digital age (Sanusi, Ayanwale, & Chiu, 2024).

This research seeks to address this gap by exploring the kinds of Generative AI tools students use, the ways they integrate them into their studies, and their overall effect on academic engagement. Understanding this dynamic is crucial, as it informs educators, policymakers, and curriculum designers on how to integrate AI responsibly while safeguarding academic integrity and promoting student-centered learning.

Rationale for the Study

The rapid integration of generative artificial intelligence (AI) into education has transformed the ways students access information, complete assignments, and engage with learning tasks. In the Ghanaian context, particularly within Colleges of Education, students are increasingly exposed to AI tools such as ChatGPT, Quillbot, and Grammarly. While these tools promise enhanced efficiency, personalized learning, and academic engagement, concerns also arise about overdependence, plagiarism, and reduced critical thinking. Despite the global discourse on generative AI, limited empirical research exists within Ghana's Colleges of Education regarding how students utilize these tools and their impact on academic engagement. This study therefore provides timely insights into both the opportunities and risks of generative AI in higher education. The findings will inform educators, policymakers, and curriculum designers on strategies for integrating AI responsibly while safeguarding academic integrity and sustaining student-centered learning.

Objectives of the Study

The objective of this research specifically aims to:

1. examine the kinds of Generative AI tools employed by students in the selected College of Education.
2. identify the different ways students utilize Generative AI in their learning.
3. assess the effect of Generative AI use on students' academic engagement.

Theoretical Framework

The theoretical framework for this research is grounded in constructivist learning theory and the technology acceptance model with engagement theory.

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The Constructivist Learning Theory

The theoretical framework for this research is grounded in Constructivist Learning Theory, particularly as articulated by theorists such as Jean Piaget and Lev Vygotsky. Constructivism posits that learners construct knowledge through their experiences and interactions with the world, emphasizing the active engagement of students in the learning process (Piaget, 1973; Vygotsky, 1978). In the context of this study, AI tools can be viewed as facilitators of constructivist learning, enabling personalized learning experiences that align with individual students' needs, preferences, and prior knowledge. By utilizing adaptive learning systems and AI-driven feedback mechanisms, students engage in self-directed learning, thereby constructing their understanding through exploration and inquiry. The choice of Constructivist Learning Theory as the theoretical foundation is particularly relevant for several reasons. First, as AI technologies evolve, they increasingly support individualized learning pathways that are central to constructivist principles. For example, platforms such as Smart Sparrow and DreamBox Learning apply adaptive learning algorithms that adjust content and assessments based on real-time analytics of student performance (Lai et al., 2020). This adaptability cultivates a learner-centered environment where students can progress at their own pace, explore topics of interest, and receive immediate feedback, ultimately fostering deeper understanding and retention of knowledge. Additionally, Vygotsky's concept of the Zone of Proximal Development (ZPD) emphasizes the importance of social interactions in learning, suggesting that students benefit from collaboration and guidance from teachers or more knowledgeable peers (Vygotsky, 1978). AI can enhance collaborative learning experiences by providing tools that facilitate peer interaction and feedback. Collaborative platforms like Google Classroom or AI-based peer review systems allow students to engage in group projects and discussions that enhance social learning. Such applications underscore AI's role in creating supportive educational ecosystems that align with constructivist principles, making this theoretical framework a fitting choice for this research.

The Technology Acceptance Model

Even the best learning applications cannot promote learning if the learners use it minimally or fail to utilize all its helpful features. A theory frequently employed to explain how new software or information technologies are adopted by learners is the Technology Acceptance Model (TAM; Davis et al., 1989, Venkatesh and Davis, 1996). The TAM was developed to explain and predict how users accept and implement new technological tools. Over the years, TAM has been frequently studied and extended (for an overview, see Chuttur, 2009; Yousafzai et al., 2007a). It focuses on four central constructs: Perceived Ease of Use, Perceived Usefulness, Intention to Use, and Actual System Use. **Perceived Ease of Use** evaluates whether potential users perceive the technology as easy to operate. Technologies considered easy to use are more likely to be adopted, as they reduce the effort required for learning and using the system (Venkatesh and Davis, 2000). **Perceived Usefulness** refers to the belief that the technology will improve one's performance (Opoku and Enu-Kwesi, 2019). **Intention to Use** describes the extent to which a person has the behavioral Intention to Use the technology. **Actual System Use** is the actual behavior of users, indicating how often and to what extent the technology is used. According to the extended TAM (Venkatesh and Davis, 1996), both Perceived Ease of Use and Perceived Usefulness directly influence Intention to Use, which in turn is a strong predictor of Actual System Use. External factors such as system experience, educational level, digital Self-Efficacy and age can influence Perceived Ease of Use and Perceived Usefulness. However, there is no consensus on these external factors, as different studies have identified varying influencing variables (Chuttur, 2009; Yousafzai et al., 2007a). Davis et al. (1989) observed that the influence of Perceived Ease of Use on behavioral Intention to Use tends to diminish as users become more familiar with a technology. Further research supports this, showing that the effect is more pronounced in the early stages of technology adoption, but becomes less evident over time (Adams et al., 1992; Chau, 1996; Gefen and Straub, 2000; Igbaria et al., 1996).

In this study, perceived usefulness refers to students' belief that generative AI tools like ChatGPT, Gemini, or Copilot improve their learning by making it more effective, efficient, and enhancing their academic performance. Perceived ease of use indicates how much students think these tools are simple to use and require little effort to interact with. When students have positive perceptions of both usefulness and ease of use, they are more inclined to accept and regularly use generative AI tools in their academic work.

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue X October 2025

The Technology Acceptance Model (TAM) offers a technological basis for understanding how students' beliefs about the usefulness and ease of use of generative AI tools impact their decision to adopt and integrate these tools into their learning activities. This adoption then influences how engaged they become in their academic work.

Engagement Theory

Engagement Theory, developed by Kearsley and Shneiderman (1998), provides a pedagogical framework emphasizing how technology can enhance learning engagement. It suggests that meaningful learning happens when students are actively involved, collaborate with others, and produce knowledge that has value beyond the classroom. The theory revolves around three main principles:

- Relate: This principle stresses the importance of collaboration and communication among learners.
- Create: It highlights active learning through the development of meaningful projects.
- Donate: This emphasizes the significance of contributing knowledge or products to an authentic, real-world audience.

Generative AI tools align well with these principles. They support Relate by promoting collaborative learning through teamwork and AI-assisted problem-solving. They foster Create by enabling students to invent essays, lesson plans, or research ideas in creative ways. Finally, they facilitate Donate by allowing learners to refine and share their outputs, providing a sense of academic contribution.

From this viewpoint, Engagement Theory explains how generative AI encourages behavioral, cognitive, and emotional engagement by making students more active, curious, and involved in their learning process.

METHODOLOGY

Research design

The study adopted a mixed-method research approach, which involves gathering and analyzing both quantitative and qualitative data to explain a phenomenon, address research gaps, or provide deeper answers to the research questions. This approach was selected because it offers a more comprehensive understanding of the relationship between generative AI use and students' academic engagement. By encouraging active respondent participation, it allows for richer data collection and more in-depth insights.

Specifically, the study employed a sequential-explanatory design. As Creswell 2017 explains, this design begins with the collection of quantitative data, followed by qualitative data that builds on the themes identified. In line with this, the researcher first gathered quantitative data to assess the impact of generative AI on student learning and academic engagement, primarily through survey questionnaires administered to participants. The analysis of this data using percentages and mean provided the basis for the next stage, where qualitative data was collected through semi-structured interviews. The qualitative responses were then examined using thematic analysis of the transcribed interview coded into themes to explore and clarify the relationship between the use of generative AI and students' academic engagement.

Population

Population encompasses the whole group of individuals or items that possess shared characteristics pertinent to a research study (Norman & Fraenkel, 2000). For this study, the population comprised students from a selected College of Education in Ghana's central region, with a target population totaling 298 students, 163 female and 135 males.

Sample and sampling techniques

The study employed purposive sampling to select ninety-four (94) Level 400 students. These students were intentionally chosen because they were in their final year who were back from their mandatory internship program. They were selected to be part of the study because they happened to be students who would be requiring

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the use of Gen AI tools most because of their project work. and the researchers aimed to investigate how they utilize generative AI and how it influences their academic engagement.

Validity and Reliability of the Study

The validity of the study was ensured by using a pilot study to test the questionnaire and interview schedule before administering them to the sampled students. The reliability of the study was also ensured by using a test-retest reliability method to determine the consistency of the responses of the sampled students.

Ethical Considerations

In the quest to integrate AI into education, ethical considerations must be carefully evaluated. Concerns surrounding data privacy, algorithmic bias, and the potential for AI to replace human instruction raise critical questions about the implications of technology in teaching and learning (O'Neil, 2016). In Ghana, where educational disparities are pronounced, the equitable distribution of AI resources becomes essential to prevent widening the educational gap between privileged and underserved communities (Kalantzis & Cope, 2012). Additionally, fostering a responsible AI usage framework that prioritizes the rights of students and educators is imperative. Educators must be trained not only in employing AI tools but also in understanding their ethical implications. A balanced approach to AI integration that considers both opportunities and risks is vital to ensuring that the deployment of technology enhances rather than undermines educational equity and quality. Participation was voluntary, and informed consent was obtained from all respondents and participants also had the right to withdraw at any point without any penalty. Data collected was used solely for academic purposes and securely stored to prevent unauthorized access.

Limitations of the Study

The study focuses only on the kinds of generative AI tools used, identify the different ways students utilize these GenAI in their learning, and overall influence on their academic engagement among students in the selected college of education in Ghana. The findings of this study may not be generalizable to other institutions of higher education outside the selected college of education.

RESULTS AND DISCUSSION

This section presents a detailed discussion of the findings derived from the collected data. The analysis follows a two-part structure based on the sequential-explanatory design, where quantitative data is gathered and analyzed first, followed by qualitative data. The quantitative data uses descriptive statistics such as mean, frequency, and percentage to analyze the results, aimed at addressing the research problem. Subsequently, qualitative data is collected and analyzed thematically to provide deeper insights and reinforce the quantitative findings. In designing the qualitative phase, the researchers formulated their interview questions around the highest and lowest mean scores in each table to clarify and further elaborate on the quantitative results.

Table 1: Kinds of Generative AI used by the students

kinds of Generative AI	Frequency (F)	Percentage (%)
ChatGPT	58	30.5
Gemini	18	9.5
Microsoft Copilot	10	5.3
Chatbot	28	14.7
Quillbot	45	23.7
Grammarly	23	12.1
Perplexity	4	2.1
Canva	2	1.1
Gencraft	1	0.5
Brainly	1	0.5
Total	**190**	**100**

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue X October 2025

Table 1 revealed that most respondents reported using ChatGPT, accounting for 58 responses (30.5%). This was followed by Quillbot with 45 responses (23.7%). In third place was Chatbot with 28 responses (14.7%), followed by Grammarly with 23 responses (12.1%). Gemini recorded 18 responses (9.5%), while Microsoft Copilot had 9 responses (5.5%). Perplexity and Canva were used less frequently, with 4 (2.1%) and 2 (1.1%) responses, respectively, and the least used tools were Gencraft and Brainly, each with only 1 response (0.5%). This indicates that students in the selected College of Education primarily rely on ChatGPT, QuillBot, and Chatbot. As Hu (2023) notes, ChatGPT has become the most widely used AI globally. Thus, it is evident from Table 1 that the generative AI tools most commonly used by these students are text-based AI applications.

In the qualitative phase, students provided rich insights into their frequent use of text-based AI tools, particularly ChatGPT and QuillBot, on campus. From the data, following themes emerged.

The first recurring theme, Helpful in schoolwork, highlighted why students rely heavily on generative AI like ChatGPT. “Participants shared their views in the following ways.”

Respondent 1 noted, “For me, accessing ChatGPT is the easiest among all the AI generators because once you ask a question, the answer is quickly generated.”

Respondent 7 added, “I mostly use text-generated AI like ChatGPT because they are user-friendly, give accurate information, and are free for everyone.”

These responses suggest that students turn to ChatGPT primarily because of its simplicity, accessibility, and usefulness in supporting their academic tasks more efficiently. This aligns with the [27] study, which emphasized that ChatGPT not only assists in academic writing, essay development, and translation but also enables users to summarize texts, ask and answer questions, and interact in a peer-like manner.

The second theme identified for why students often use text-based AI tools like ChatGPT is Laziness. Several respondents admitted that they turn to ChatGPT because they feel too lazy to complete their schoolwork independently.

Respondent 2 shared, “I have been using ChatGPT because I became lazy, and I feel that ChatGPT can provide all the answers that I need.

Respondent 4 added, “I become lazier in doing schoolwork because I’ve become too reliant on using AI.

These accounts suggest that while ChatGPT’s support features are useful, some students resort to it out of laziness, making them overly reliant on the AI tool. As Duggal, (2023) argues, integrating AI in education can foster indolence by automating tasks that would otherwise require analytical thinking and deeper cognitive engagement. The findings from this study align with [8] assertion, showing that heavy reliance on ChatGPT has contributed to students’ laziness.

The researcher also sought to explore why only a few respondents utilized generative AI tools such as Gencraft. The third theme, Unfamiliar, highlights the reasons behind students’ limited use of these types of AI.

For instance, Respondent 7 explained, “Because I’m not familiar with that type of AI, and I have never used an image generator AI since I don’t have any idea of the purpose of that type of AI.”

Respondent 9 argued, “For me, I didn’t know that there is already a type of generative AI tool like Gencraft and how it is used, and for what purpose.

Respondent 10 also shared, “I mostly don’t use image-generated AI like Gencraft because they are not as versatile or as widely applicable as text-based AI.”

These responses suggest that students’ limited exposure to and knowledge of image generator AI, particularly Gencraft, explains why they rarely use it. Lee, (2023) emphasizes that image generator AI is a rapidly advancing field with complex algorithms and datasets that are not always easy to understand, leaving many people unfamiliar with or hesitant toward it.

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue X October 2025

Table 2: The Usage of Generative AI on Learning

Usage of Generative AI	**Mean**	**Verbal interpretation**
1. I believe generative AI technologies can improve my digital competence	3.34	Moderate
2. Generative AI makes it easier for students to find study material	2.94	Moderate
3. Generative AI has increased my academic engagement	3.34	Moderate
4. Generative AI makes it easier for students to understand the lessons given by the teacher	2.97	Moderate
5. Using generative AI tools has expanded the scope of my ideas.	3.08	Moderate
6. Generative AI tools have contributed to improving the overall academic rigor of my work	3.56	High
Overall	**3.23**	**Moderate**

NB: 1-1.49=very low/strongly disagree; 1.50-2.49= low/disagree; 2.50-3.49=moderate/neutral; 3.50-4.49=high/agree; 4.50-5.49=very high/strongly agree

Table 2 presents the results on the use of generative AI in students' **academic and learning practices**. The table shows an overall mean score of 3.23, interpreted as moderate, indicating that generative AI has been moderately useful to students. Among the items, statement 6 recorded the highest mean (3.56)**,** followed by statements 1 and 3 (3.34 each)**.** Statement 4 and **5** obtained a mean of 2.97 and 3.08 respectively while statement 2 had the lowest mean of 2.94, which is still within the moderate range. This suggests that students' responses generally fall in the middle, neither strongly agreeing nor strongly disagreeing. Since statement 6 had the highest mean, it suggests those students consider generative AI tools to have contributed to improving the overall academic rigor of my work.

In the **qualitative phase**, the study further explored whether students' use of generative AI **supported them in finding study resources**. Most respondents affirmed that AI tools significantly assisted them in accessing lessons and study materials. This theme, referred to as Searching Up, highlights their experiences.

Respondent 6 stated, "Based on my experience in using AI tools, it's really useful and effective for searching lessons or study materials that I want to study. I can just type in the lesson, and it appears instantly."

Respondent 8 added, "Yes, because generative AI like ChatGPT is efficient in finding lessons, especially when I need more details about topics I struggle to understand. With one click, I can easily access all the information I need and paraphrase using tools like Quillbot."

These findings show that generative AI has become a convenient and efficient way for students to access lessons and materials, especially when they miss classroom notes. AI's ability to generate study resources quickly has been a key benefit.

The study also examined whether generative AI **supports understanding teachers' lessons**. The theme Synthesizing the Lessons captures this aspect. Most respondents noted that AI simplified lessons by summarizing or organizing large amounts of content, making comprehension easier.

Respondent 9 explained, "For me, AI has been helpful in making lessons easier since it can summarize or create bullet points from long texts.

Respondent 10 added, "Generative AI has made difficult lessons and questions from the teacher easier by researching challenging part of the lessons."

Overall, these responses indicate that generative AI has become an effective tool for supporting students in better understanding classroom lessons.

Table 3: The Effect of Generative AI on Students' Academic Engagement

Generative AI Effect on Academic Engagement	**Mean**	**Verbal Interpretation**
AI's way of linking what students like with the subject matter makes students understand more and are enthusiastic about learning.	2.89	Moderate
Generative AI increases my productivity in lessons.	3.24	Moderate
By using generative AI tools in this field, I was able to improve my educational journey.	3.07	Moderate
Generative AI increases my creativity and engagement in school activities.	3.61	High
I recommend the use of AI tools to other students as it increases academic engagement.	2.98	Moderate
Generative AI tools have improved my ability to present complex data effectively.	3.12	Moderate
AI helps students improve their achievement in learning, thus improving academic engagement.	3.52	High
Overall	**3.20**	**Moderate**

NB: 1-1.49=very low/strongly disagree; 1.50-2.49= low/disagree; 2.50-3.49=moderate/neutral; 3.50-4.49=high/agree; 4.50-5.49=very high/strongly agree

Table 3 presents the results on the effect of generative AI on students' academic engagement**.** The overall findings show that generative AI has had a moderate impact (3.20) on students' engagement. Among the indicators, statement 4 recorded the highest mean (3.61)**,** suggesting that generative AI highly enhanced students' creativity and academic engagement. This was closely followed by statement 7 (3.52), also interpreted as high, and statement 2 (3.24)**,** which shows that Generative AI increases their productivity in lessons. Meanwhile, statement had the mean score (3.12)**,** indicating Generative AI tools have improved their ability to present complex data effectively. Statement 3 and 5 with mean values (3.07) and (2.98) suggested that Generative AI improved their educational journey and recommend the use of AI tools to other students as it increases academic engagement respectively. Finally, **s**tatement 1 (2.89) indicated, AI's way of linking what students like with the subject matter makes students understand more and demonstrate enthusiasm in learning.

The qualitative results further explored how generative AI has influenced students' **creativity and school engagement**. The first theme, Generating Ideas, revealed that some respondents acknowledged AI as a tool for boosting creativity by providing them with diverse ideas they could adapt for academic tasks.

Respondent 9 shared, "Generative AI has helped me become more creative, especially in writing research."

Similarly, Respondent 6 expressed, GenAI is useful in tasks like poster making, where I feel I can create innovative outputs with AI's suggestions.

These insights suggest that **generative AI fosters creativity by serving as a source of inspiration and guidance**, offering formats, explanations, and novel ideas that aid students in completing academic tasks. This supports Ali and Eshaq (2023), who noted that AI technologies can analyze vast amounts of data to reveal hidden patterns, leading to fresh design concepts and perspectives that may otherwise be overlooked.

However, not all respondents perceived AI's role positively. A second theme, Plagiarism and Less Engagement, emerged, with three respondents expressing concerns that AI-generated ideas could be seen as **plagiarism**.

Respondent 2 explained, "No, because I've become too reliant on AI. For instance, if I am called during recitation and I don't know the answer, I still turn to AI for help instead of actively engaging.

Similarly, Respondent 5 noted that "while AI helps me complete academic tasks easier, it does not foster creativity and active participation in class."

"Respondent 4 echoed "AI has been useful, but the creativity is credited to the tool, not to me. I also don't recite more because of it."

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These reflections highlight the double-edged role of generative AI in academic life: while it can guide students and boost participation through interactivity, it also raises risks such as plagiarism and overreliance. Previous studies also emphasize that AI tools, by generating text without proper citation, pose challenges to academic integrity **(**Rodrigues et al., 2024**).**

Another finding relates to **how AI use influences students' interest** in classroom lessons. Students have mixed influence of GenAI usage. whilst some respondents preferred traditional teaching methods over AI usage, other respondents found AI's interactive features motivating.

Some expressed their reasons behind their preference for traditional teaching methods over AI usage.

Respondent 8 stated, "I become more interested when the teacher discusses in class. AI alone is not enough to keep me engaged."

Similarly, Respondent 3 said, "The explanations from ChatGPT don't stick in my mind. I learn better when teachers explain directly."

Respondent 10 added, "AI didn't really increase my interest in lessons. What engages me more is the teacher's style, especially when they capture my attention."

These perspectives show that AI, while supportive in completing tasks, does not necessarily foster deeper interest in lessons. Educators need training to effectively use AI tools and interpret data outputs to guide instruction (Haleem et al., 2022).

These respondents, on the other hand found AI's interactive features motivating.

Respondent 7 commented, "Yes, AI made school more interesting and interactive; it feels like I'm talking to someone."

Respondent 3 agreed, saying that AI simplified learning and made lessons easier to understand, while Respondent 6 highlighted that AI's assistance during difficult discussions helped sustain their interest.

These accounts suggest that generative AI's interactive features create more engaging learning experiences for some students, empowering them to prepare for classroom discussions. This aligns with Kadaruddin (2023), who found that AI-driven content delivery promotes problem-solving, critical thinking, self-directed learning and adaptability, empowering students to shape their educational journey.

CONCLUSIONS

From the findings, the following conclusions were drawn:

- Students in the College of Education in the selected school in Ghana rely heavily on text-based generative AI tools, especially ChatGPT, which they use as valuable companions in completing and navigating their academic tasks.
- These tools have become instrumental in enhancing language skills, offering instant feedback on grammar, clarifying difficult vocabulary, and helping learners better grasp complex terms encountered in digital spaces.
- Beyond language support, generative AI has stimulated creativity and encouraged academic participation by providing fresh ideas and guidance. Yet, challenges such as plagiarism and overdependence on AI limit authentic engagement and diminish originality in students' work.

Implications for educational practice

- Generative AI tools like ChatGPT spark curiosity by offering instant feedback, tailored learning journeys, and interactive experiences that turn complex concepts into manageable insights. They empower students

to explore lessons in advance, paving the way for a more individualized and dynamic approach to education.

- AI-powered platforms refine students' writing by polishing grammar, enriching vocabulary, and guiding structure. Acting as intelligent research companions, these tools transform academic writing into a more approachable and empowering process.
- Generative AI serves as a collaborative muse, inspiring fresh perspectives for research, essays, and creative projects. By expanding the horizon of possible ideas, it amplifies students' creativity, helping them push beyond conventional thinking and unlock new levels of productivity.

Recommendations for Educational Practice

- Teachers should harness generative AI as a supportive companion in learning, guiding students to see it as a tool that strengthens their own effort rather than a shortcut.
- Curriculum developers ought to craft forward-thinking frameworks that uphold academic honesty, blend AI-powered assistance with human-centered instruction, and set clear boundaries for ethical use.
- Both educators and learners require purposeful training to unlock AI's potential training that cultivates critical inquiry, originality, and problem-solving instead of encouraging passive dependence and fostering laziness.

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