



Addressing the Elephant in The Room: The Impact of Using Artificial Intelligence in Education

Matt Daniel C. Bernal¹, Gabriel A. Bunhayag², Darryn Stacy D. Loyola³, Jhaffney C. Tisado⁴, Genesis G. Genelza^{*5}

^{1,2,3,4,5} University of Mindanao Tagum College, Philippines

Basic Education – Junior High School Department

ABSTRACT: Artificial intelligence is eminent and useful in a world where everything has been digitalized. AI has surfaced numerous times in business, healthcare, services, and even the building sector. More importantly, it has promised increased productivity, enhanced security, and improved project management skills in education and academics, particularly for students with tons of unfinished work. This systematic literature review addressed the impact of using artificial intelligence in education. The review gathered four thematic points and features of AI in education: Personalizing Learning Experiences with Tailored Instructions to Individual Needs, Creating Ethical Dilemmas in AI-driven Education, Comprising Content Accuracy and Academic Authenticity, and Enabling Academic Dishonesty through AI tools. To be able to address the issues in AI, students must always act with an open mind. Hence, in the case of academic dishonesty, there must be open communication with students and teachers about how AI is used in the learning process. Encouraging discussions about the benefits and limitations of AI in education is paramount.

Corresponding Author:

Genesis G. Genelza

Orcid: 0000-0001-5577-7480

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INTRODUCTION

People and society have become increasingly dependent on artificial intelligence (AI) technologies in the modern day. AI could lead to a time when all people live happy, fulfilling lives. It also carries significant risks of persecution and disaster. In recent years, debates over whether or not we should (re)trust AI have surfaced numerous times and in various contexts, including business, academics, healthcare, services, and so on (Lu Cheng et al., 2021). The negative use of AI somehow spreads misinformation through deepfakes, fake news, bias, discrimination, and privacy violations through data surveillance, which could also harm the quality of education in schools. With proper regulation and ethical oversight, AI misuse can have serious social, economic, and security consequences, especially in education.

Globally, according to Wu, Huang, and Gong (2020), Artificial intelligence (AI) is becoming more and more integrated into daily life and is profoundly influencing the very structure of contemporary society as a result of the quick development and use of a new generation of AI algorithms and products. Specifically, AI algorithms and models have been widely used in various decision-making contexts, including financial lending, traffic control, criminal justice, and medical diagnosis. Safety and fairness are just two of the many possible concerns brought about by the growing use of AI-based automatic decision-making systems. An additional example is intelligent justice, where AI algorithms determine whether to allow parole for a prisoner based on behavioral traits. Such an algorithm has been accused of making unfair and discriminatory conclusions depending on cultural background and ethnicity. An artificial intelligence (AI)-based digital lending algorithm may deny loan applications in the financial sector due to biased assessment. Industry, academia, and government organizations have all realized that adequate steps must be taken to reduce the hazards associated with AI and that the safety and governance of AI applications are a growingly significant concern to society (Genelza, 2024).

In addition, the building sector is vital to economic growth everywhere, including in the Philippines. It is essential to expanding infrastructure and jobs (Siman, 2023). As this industry negotiates, the use of Artificial Intelligence (AI) technologies stands out as a solution to the challenges of modernization—Possibilities for transformation (Bang & Olsson, 2022). AI promised

increased productivity, enhanced security, and improved project management skills, which greatly helped the Philippine building industry. (Korke et al., 2023) landscape. However, the Philippine construction sector has to contend with issues such as restricted legal obstacles, a lack of qualified workers, and technological infrastructure (Dimaculangan, 2023, p. 462) (Subia and others, 2019; Santos et al., 2022). It is crucial to comprehend the Philippines' present AI adoption situation, recognize these obstacles, and create methods to overcome them.

According to the study of Fidinansyah (2024), where he analyzes the contribution of artificial intelligence (AI) on English language training at the University of Mindanao's Digos College, the study examines how University of Mindanao students apply AI in several facets of their instruction. The initial research question (RQ1) examined how pupils use artificial intelligence to learn English. RQ2, the second research question, looks into how AI supports students in their everyday lives and learning processes. Fostered English proficiency was recognized as the third research question (RO3) due to the application of AI to everyday tasks and English language instruction. The process of gathering data included a combination of qualitative techniques, such as organized observations in the classroom and interviews with 10 students from 14 to 44 years of the Department of Teaching English (DTE). The information gathered was examined using a case study to identify patterns and Issues connected to the incorporation of AI in English teaching. Data triangulation was utilized to cross-check data from several sources. The research demonstrates AI's beneficial contributions to education and encourages developments for incorporating AI into teaching methods.

Furthermore, the study is grounded in the theory of dynamics by Pitrat (1992), which states that AI has a positive and negative impact on society concerning the progress in cognitive science. He makes the case for applying the findings of the artificial intelligence theory to cognitive science research as he believes that research on AI will make it easier or difficult to examine natural intelligence from a fresh perspective. Keeping with this idea, one can hope that the theory of teaching may advance if AI theory's accomplishments are considered.

Schank (1993) also expresses a viewpoint similar to Slade's (1991), considering that the examination of education in the context of the impact of artificial intelligence will be substantial on education, science, and technology. The experience demonstrates how beneficial this notion is. Contributions to the theory and practice of systems that process natural language (NLPs) and the cognitive. They could view the challenges of teaching from a different perspective thanks to psychology and cognitive linguistics.

Researchers have seen many studies about artificial intelligence. However, the researchers did not find any research about how AI can affect education. The use of AI can have both good and devastating effects on society. For instance, the use of ChatGPT in public and private schools has made them rely too much on AI, giving essays, homework, quizzes, etc., without realizing that the information can be false. Students lack consciousness of what is wrong and what is morally right. They care about passing a requirement easily and effortlessly, not concerned about how it may affect them in the future. The topic is important because AI has been relevant recently, causing us to depend on it. Like all technology, AI has flaws, from privacy concerns to data breaches. These problems can influence our lives in the worst possible ways. Hence, this study would like to comprehend how AI can influence different aspects of our lives and the importance of awareness in using AI.

This study aligns with the United Nations' Sustainable Development Goal (SDG) 4 – Quality Education, which emphasizes giving everyone access to high-quality, inclusive education. Breaking the cycle of poverty and advancing social and economic progress requires education. People who receive high-quality education are better equipped to thrive in life, enhancing employment opportunities and fostering creativity. This objective emphasizes the value of lifelong learning and making sure that underprivileged groups, such as girls, children with disabilities, and rural communities, have equitable access to education.

METHOD

Research Design

In order to address the topic of how AI can impact society, this research article used a Systematic Literature Review (SLR) as a qualitative methodology. A systematic literature review is a deliberate and methodical approach to finding, assessing, and summarizing prior research pertinent to a given topic or investigation. A thorough search was conducted across several databases, scholarly journals, books, and other sources to locate all relevant research on the subject of interest. The criteria should be fully defined before the study, and the plan or methodology of the systematic review should be clearly stated. Other researchers can use a variety of databases and grey literature sources to duplicate this thorough and transparent search. This entails organizing a comprehensive search strategy and strongly emphasizing responding to a specific question (Dewey & Drahota, 2016).

RESULTS AND DISCUSSION

Based on the results drawn from the selected papers, the following statements and credible information should be emphasized in this paper, as shown in Table 1.

This review attained four thematic points and features of AI in education: *Personalizing Learning Experiences with Tailored Instructions to Individual Needs*, *Creating Ethical Dilemmas in AI-driven Education*, *Comprising Content Accuracy and Academic Authenticity*, and *Enabling Academic Dishonesty through AI tools*. One of the advantages of AI is that it can help you improve your learning experience without sacrificing your time and effort. While AI can help you with your studies, it does not mean you will not face any dilemmas. For starters, it can contribute to your mental health problems like stress, losing motivation, etc. Students should learn how to properly handle AI when receiving information from it because it may cause inaccuracy and unreliability. Furthermore, the negative ways of using AI in education include, for example, overreliance, autonomy risk, etc. This can cause more harm than good because it affects your standing as a student and person.

Personalizing Learning Experiences with Tailored Instructions to Individual's Needs

The first theme generated during the data gathering is *Personalizing Learning Experiences with Tailored Instructions to Individual Needs*, which means that artificial intelligence personalizes education by customizing lessons to each student's unique needs, learning style, and strengths. In order to suggest resources, modify the degree of difficulty, and offer customized feedback, machine learning algorithms examine student data. This individualized strategy improves academic performance, boosts student engagement, and promotes learning effectiveness. However, algorithm bias, teacher preparation, and data privacy must be handled carefully. Notwithstanding these challenges, AI-driven education could revolutionize learning by making it more accessible and inclusive.

Furthermore, this was supported by Fitria (2021), who said that Artificial Intelligence is a technology that makes complex human life easier by allowing machines to learn and comprehend logic like humans. It learns autonomously by combining data, sophisticated algorithms, and iterative processing. Machine learning, neural networks, cognitive computing, computer vision, and scientific language processing are all areas of research within the broad topic of Artificial Intelligence. It is becoming increasingly apparent in education, changing the science, math, engineering, and technology curricula. Genelza (2024) also stated that AI can help educators perform their jobs more efficiently, allowing them to better understand their students' requirements and create individualized learning opportunities.

In addition, Božić (2023) stated that digital tools in primary school education are increasingly being used to enhance learning experiences. Artificial Intelligence can provide personalized learning based on individual needs and strengths. AI can analyze learning patterns, offer personalized recommendations, and automate tasks like grading. This saves teachers time and allows them to focus on other teaching aspects. However, careful monitoring and regulation are necessary to ensure ethical and responsible use.

With this study, AI can adapt to education by teaching lessons to students' needs, improving their status and grades, or even achieving their goals most easily. While we know that AI can enhance learning through its highest limitations and analysis, it must be of concern to others. Nowadays, dozens of kids use Digital tools like ChatGPT by providing them answers on each task. AI can improve learning environments and make them more inclusive if educators properly regulate and support them.

Creating Ethical Dilemmas in an AI-driven Education

The second theme generated during the data gathering is *Creating Ethical Dilemmas in an AI-driven Education*. This means the student's usage of AI can affect them psychologically, like the lack of motivation to learn and lessen their academic success using AI as an educational system. Students may also develop anxiety using AI as their guide to their academic performances and the fear of failing their school requirements due to using AI tools in their assignments or essays. This negatively affects the student's trust in their work, causing them to feel left behind on their lessons or over-rely on using AI tools, making them lack the motivation to work or study the lesson.

The theme was supported by Naseer, Ahmad, and Chishti (2025), who stated that increased emotional stress has been associated with using AI in professional and educational contexts, especially regarding grading and decision-making. The pressure to trust AI systems while still taking accountability for their correctness adds to this tension. Additionally, AI may reduce attention span because users have less time to focus on intricate or creative work. This is especially true in educational settings where educators must balance critical thinking and their students' requirements.

Besides, Velastegui et al. (2023) stated that various psychological risks are associated with reliance on AI technologies. The main worry is the possibility of less human contact as AI assumes greater responsibility for the education process. Furthermore, the ongoing surveillance and data collection capabilities of AI tools may cause privacy issues and the anxiety of being watched all the time, which can be psychologically disturbing for pupils. Additionally, some AI applications' predictive features may categorize students into particular learning pathways, limiting their exposure to a wider range of subjects and possibly inhibiting their capacity for critical thought and creativity by encouraging an overly limited focus on anticipated advantages or disadvantages. AI can improve educational experiences by promoting individualized learning. It is crucial to continue to be aware of the psychological effects of adaptive learning. Institutions need to put into practice AI tools carefully, considering their wide-ranging effects on students' well-being. Making sure AI helps instead of impeding the growth of vital life skills like self-control, fortitude, and interpersonal skills for students to develop holistically and communicate is essential.

Thus, AI can be a good tool to help students' psychological states, but we cannot avoid the risk of AI being bad for students. AI psychologically affects the students' study. Based on the data we collected, students who use AI had anxiety, like being watched, and the fear of failing. Our data also showed that students using AI in their education reduced their attention span. This also negatively affects the students' trust in their studies because AI cannot give the exact answer it gave. This also restricts students' exposure to various topics and potentially stifles their ability to think critically and creatively.

Compromising Content Accuracy and Academic Authenticity

The third theme generated during the data gathering is *Compromising Content Accuracy and Academic Authenticity*. AI can benefit students by increasing their knowledge and improving their cognition. This does not come without an issue; you can generate text in seconds using AI like ChatGPT, which may be good. This does not change the fact that it failed to credit its authors or property cites its sources, increasing the student's potential to commit plagiarism. Plagiarism is when someone uses another person's work, ideas, or information without giving credit. It is considered a form of academic misconduct and intellectual theft.

Also, this was supported by Jarrah, Wardat, and Fidalgo (2023), who stated that using AI-generated writing in academia raises ethical concerns and moral dilemmas. The reliance on AI can undermine student learning evaluation and diminish a degree's value. Bayne (2018) demonstrates that excessive dependence on AI may lead to inadequate comprehension of the material, resulting in unpreparedness for subsequent assignments. Additionally, AI can facilitate plagiarism and cheating. Compromising the integrity of the learning environment (David, 2023; Qasem, 2023). This is just one of its many issues. Another problem that AI seems to forget is how accurate and dated its information is, making people double-check the answers they received from AI compared to credible sources. This problem will always remain prevalent, especially when more and more people discover new things and disprove theories.

Still, Sallam (2023) reviewed 60 articles on ChatGPT in healthcare, medical education, and academia. He found various concerns across the studies, from plagiarism to incorrect responses and inaccurate citations. Therefore, the implications of ChatGPT-assisted learning require immediate attention to ensure its benefits are optimized while its drawbacks are minimized.

Consequently, the researchers would like you to consider that AI may not be a credible and reliable source of information. It is always good to double-check and proofread the information that ChatGPT has given you, especially when you know that many studies and discoveries have debunked this information. Lastly, never forget to cite the sources and give the authors the credit they deserve for giving you an authentic piece of published and peer-reviewed information.

Enabling Academic Dishonesty through AI Tools

The fourth theme generated during the data gathering is *Enabling Academic Dishonesty through AI Tools*. It can be interpreted that in modern society, as AI evolves, the use of AI tools in education starts to rise because of the fast and efficient ways it can give to its learners and educators, but, despite that, there are also negative effects alongside it. As students and teachers continue to use AI, they might be unaware that some of the information that AI has given them might be misinformation, discrimination, and autonomy risk while using AI tools without being mindful of its contents and information, leading to students submitting dishonest work and teachers possibly teaching or spreading wrong information.

Likewise, this was supported by Mohammadkarimi (2023), who said that the definition of academic dishonesty includes any cheating or unethical classroom conduct that violates equity and the value of honesty (Sevimel-Sahin, 2023, p. 308). With the development of AI, students now have access to many resources for producing authentic-looking assignments with minimal work (Crawford et al., 2023). In order to help students avoid and deal with academic dishonesty in their work, teachers play a crucial role in maintaining the integrity and standards of the educational system, which depends on their capacity to identify instances of

plagiarism or cheating. However, it is now more challenging for educators to consistently identify instances of academic dishonesty due to the development of powerful AI tools. Because students can alter AI-generated content to look like their work, teachers may find it difficult to distinguish between real effort and fraud (Farrokhnia et al., 2023; Sullivan et al., 2023).

In addition, Basha (2024) stated that over-reliance on AI could lead to the loss of critical thinking skills and traditional skills like math and handwriting. Genelza (2024) mentioned that addressing ethical concerns like privacy and data misuse is crucial; biases and errors in AI systems may affect students' cognitive development and academic performance.

Accordingly, with the researchers' studies mentioned in this paper, we should be more aware and considerate in using AI tools in education as it should only be used as a tool to aid in learning and not as a way to submit school requirements easily as it can have negative impacts in the future. Students should also be morally aware that it is important to learn and understand the lessons and activities given by their teachers to hone their skills and value honesty, which may be helpful in their future careers and opportunities.

Table 1: List of literature on using Artificial Intelligence in Education

AUTHORS	TITLE OF THE STUDY	LOCAL E	METHO D	RESULTS AND DISCUSSION	RECOMMENDATIO NS	THEMES
Dieterle, Dede, and Walker (2024).	The cyclical ethical effects of using artificial intelligence in education.	London	Quantitati ve	Digital tools and learning platforms are widely used in education, generating vast amounts of multimodal data from various sources. AI techniques like machine learning, computer vision, and natural language processing can analyze this data to enhance instruction, predict learning outcomes, and automate decisions. However, using AI in education raises complex ethical concerns about data generation, analysis, and interpretation.	This section highlights how AI-driven education has the potential to enhance lifelong learning and life outcomes by increasing the efficacy and transformative power of education. Although AI can improve traditional teaching methods, its greatest benefit is opening up fresh and creative learning methods. Education from the industrial age must give way to systems that give pupils cutting-edge information and abilities for a changing digital world. Similar to the significant cultural transformations of the early 20th century, this transformation is urgent due to global issues like economic instability, climate change, and technological advancements.	Personalizin g Learning Experience with Tailored Instructions to Individual Needs.
Harry (2023).	Role of AI in Education.	Usa, washington DC	Qualitative	Personalized learning driven by AI adapts learning experiences to	AI can automate assessment and grading procedures, giving pupils immediate feedback and saving	

				<p>each student's unique needs, learning preferences, and strengths. AI evaluates student data using machine learning algorithms to make resource recommendations, modify the level of instruction, and offer personalized feedback, all of which improve student engagement and academic achievement. Duolingo and Carnegie Learning are two AI-based programs that have shown promise in raising student achievement. Nevertheless, ensuring data accuracy and training teachers for successful implementation are obstacles. Notwithstanding these challenges, AI-driven personalized learning holds promise for transforming education by providing tailored, adaptive support that improves student achievement in</p>	<p>teachers time. Examples include machine learning techniques and natural language processing-based automated essay grading systems. AI in education provides greater data analysis, efficiency, student engagement, and individualized instruction. However, some issues and problems must be resolved.</p>
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				various learning environments.	
Barakina, Popova, Gorokhova, and Voskovskaya (2021).	Digital Technologies and Artificial Intelligence Technologies in Education.	Russia	Quantitative	Teachers are essential in introducing these technologies, and Russian and international researchers are investigating AI's potential in education. The education system is progressively evolving, and UNESCO publications keep an eye on the field. Neural networks, virtual tools, and machine learning algorithms are used by nations such as China, Latin America, Uruguay, Brazil, and the United Arab Emirates. UNICEF Innovation is researching a Memorandum on AI, the Rights of the Child, and deep learning algorithms.	Considering all of the information presented above, we can say that when attempting to integrate artificial intelligence (AI) and other digital technology into our daily lives and education. Specifically, it should be remembered that these technologies are merely instruments intended to enhance the quality of the learning experience and how each participant interacts with the others. However, it is also essential to consider that these resources are new, and neither teachers nor students fully grasp them. Moreover, as a result, they have not yet earned the degree of trust (4.2%) for their successful use, even if their dependability and safety in operation are carefully verified.
Fitria (2021).	ARTIFICIAL INTELLIGENCE (AI) IN EDUCATION: USING AI TOOLS FOR TEACHING AND LEARNING PROCESS	Indonesia	Qualitative	Artificial Intelligence (AI) is a technology that makes complex human life easier by allowing machines to learn and comprehend logic like humans. It learns autonomously	Learning activities can be conducted at any time using artificial intelligence. AI-based apps offer chances to learn anytime and from any location without time and space constraints. Additionally, students can locate instructors outside of the school's teachers. Given this platform for online

				by combining data, sophisticated algorithms, and iterative processing. Machine learning, neural networks, cognitive computing, computer vision, and scientific language processing are all areas of research within the broad topic of artificial intelligence. It is becoming increasingly apparent in education, changing the science, math, engineering, and technology curricula. AI can help educators perform their jobs more efficiently, allowing them to understand their students' requirements better and create individualized learning opportunities.	learning and the availability of "teachers," students can select from, and they can interact with other educators, even with foreign instructors. Students' learning experiences and skills will undoubtedly be capable of better development. With AI being used in schooling, it is really helpful that the online mode has been made mandatory for the learning process, just like during the pandemic.
Limma, Jakwatanatham, Siripipattanakul, Kaewpuang, Sriboonruang (2022).	A Review of Artificial Intelligence (AI) in Education during the Digital Era.	Thailand	Qualitative	AI in education has revolutionized learning analytics, data visualization, and statistical reasoning, offering personalized advice and streamlining teaching	Future AI-driven educational strategies may include online questionnaires for better explanations and findings, enabling school administrators, teachers, and students to implement effective strategies.

				<p>processes. However, less experienced teachers struggle with AI-enabled tools. Increasing instructors' acceptance of AI technologies is crucial to overcome this, as AI technology opens up new possibilities for technology-enhanced learning applications and more efficient activities.</p>	
<p>Owan, Abang, Idika, Etta, and Bassey (2023).</p>	<p>Exploring the potential of artificial intelligence tools in educational measurement and assessment.</p>	<p>Nigeria</p>	<p>Qualitative</p>	<p>Artificial intelligence is transforming education by improving teaching, learning, and evaluation. As data and machine learning algorithms become more widely available, artificial intelligence (AI) has the potential to significantly impact student motivation, engagement, anxiety reduction, result prediction, and academic success. The use of AI technologies in educational measurement and assessment is covered in this</p>	<p>Teachers can concentrate on meaningful interactions and recognizing students' strengths and weaknesses using AI-based evaluation, which provides accurate, objective, and quick grading. However, since algorithms can be biased and students could feel uneasy about machine evaluations, it should not take the place of human judgment. A more equitable and efficient assessment system must include human input, frequent evaluation, and data protection to guarantee ethical use.</p>
					<p>Creating Ethical Dilemmas in an AI-driven Education.</p>

				section, with particular applications of AI in education highlighted.	
Naseer, Ahmad, and Chishti (2025).	Psychological Impacts of AI Dependence: Assessing the Cognitive and Emotional Costs of Intelligent Systems in Daily Life.		Quantitative	The use of AI in professional and educational settings has been linked to increased emotional stress, particularly regarding decision-making and grading. This stress is heightened due to the pressure to trust AI systems but maintain responsibility for their accuracy. Additionally, using AI can decrease attention span, as users have less time to concentrate on complex or creative tasks. This is particularly evident in learning institutions where teachers must balance their diverse client needs with critical thinking.	The study suggests the need for AI tools to reduce cognitive overload and emotional strain. Adaptive AI systems that adapt to user skills and preferences can help reduce stress. AI-based recommendations should ease anxiety, and feedback loops should allow users to fine-tune their applications and reduce emotional dependency.
LE (2024).	The Influences of AI-Enhanced Learning on Student Engagement in English Classes.	Vietnam	Qualitative	The study shows that AI-enhanced learning in English instruction positively impacts student	The study looked at how 138 non-English majors' motivation in teaching English as a foreign language was affected by AI-based tools. The findings demonstrated that AI

				<p>involvement in behavioral, cognitive, and emotional domains. AI-based technologies encourage more frequent practice opportunities and timely task completion. Nevertheless, the study also discovered that using AI-generated feedback has care omissions. Cognitive interactions enhance comprehension and problem-solving abilities; real-time feedback helps with fluency. AI also makes learning fun by lowering boredom, frustration, and bullying. However, the modest degree of confidence indicates that additional intervention is required to improve skills. Students should be provided pertinent feedback and encouraged to engage in interactive activities since they have high expectations for integrating AI into their future</p>	<p>improved psychological, cognitive, and behavioral involvement. Self-reported replies, a wide ethnic sample, potential biases, and the possibility of quick technical breakthroughs were some of the study's drawbacks. Furthermore, the study concentrated on how students' dedication to their studies affected their learning experience immediately rather than how it affected them subsequently.</p>
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				education. Despite these advantages, there are concerns regarding AI's capacity to lower learning obstacles.	
Lin and Chen (2024).	Artificial intelligence (AI)-integrated educational applications and college students' creativity and academic emotions: students and teachers' perceptions and attitudes.	China	Qualitative	Enjoyment, despair, boredom, worry, rage, pride, and other academic emotions are all important components of teaching and learning. These feelings fall into three categories: high-arousal, negative, and positive. Emotions of achievement, like fear of failing, are also important. The causal relationship between students' academic emotions and accomplishments has been investigated empirically.	AI applications improve student engagement, motivation, and problem-solving abilities. They offer gamified components for mental well-being, emotional support, and tailored feedback. They support educational equity, encourage collaborative innovation, and offer easily available tools for lifelong learning. These flexible learning pathways enhance both academic achievement and emotional health.
Hanson, Okonkwo, & Orakwe, (2024).	Implementing AI-Enhanced Learning Analytics to Improve Educational Outcomes Using Psychological Insights.	Nigeria	Qualitative	Combining AI-powered learning analytics with insights from psychology provides a transformative strategy for enhancing academic results. AI-powered solutions have shown themselves to be	Teachers and legislators must take a calculated approach to employ AI-enhanced learning analytics and psychological insights fully. This entails eliminating prejudice in AI algorithms, guaranteeing the ethical application of AI systems, and providing educators with the required training. In order to meet the varied needs of their students,

				quite successful in delivering real-time data-driven insights, tailoring educational experiences, and attending to students' individual needs. By adding psychological concepts like self-regulation, cognitive load, and motivation into AI systems, instructors can create learning settings that are more flexible, efficient, and interesting for kids.	teachers should be assisted in utilizing AI as an adjunct to conventional teaching techniques. It is necessary to have a balanced approach where AI improves learning opportunities without undervaluing teacher-student interactions.	
Ju (2023).	Experimental Evidence on Negative Impact of Generative AI on Scientific Learning Outcomes (A Pilot Research).	USA	Quantitative	The productivity impact of generative AI has been investigated, and research has indicated that Taiwan and other companies have benefited from it. However, productivity increases are not the only way the academic and professional domains differ. The application of AI in education has the potential to improve cognition or increase knowledge, but it also presents issues with accuracy and authenticity.	The study suggests that ChatGPT can improve learning experiences but may decrease overall correctness. Active groups with strong manual writing skills, native English speakers, and master's degrees generally achieve the largest correctness increase using AI.	Compromising Content Accuracy and Academic Authenticity.

				<p>Particularly when students do not interact with their reading material, AI-driven systems may present believable yet unreliable information. Students may be more prone to believing misleading information and detract from the intended cognitive consequences if they do not master the material via diligent study and involvement.</p>	
<p>AlAfnan, Dishari, Jovic, and Lomidze (2023).</p>	<p>ChatGPT as an Educational Tool: Opportunities, Challenges, and Recommendations for Communication, Business Writing, and Composition Courses.</p>	<p>Kuwait</p>	<p>Quantitative</p>	<p>According to the study, ChatGPT may make it more difficult to quantify learning results and distinguish between careful students and those who rely on automation. It advises teachers to provide students with thorough case-based and scenario-based assignments that promote critical, imaginative and creative thinking rather than theory-based questions for take-home examinations. Additionally, it suggests incorporating</p>	<p>It is recommended that teachers update their take-home tests and rubrics by including student-generated content and offering comprehensive instructions. Since ChatGPT is still in its infancy, more research is advised to comprehend its advantages and disadvantages fully for teachers and students.</p>

				ChatGPT-generated comments for discussion in workshops and submitting all evaluations on plagiarism detection software, particularly for writing courses.	
Tlili, Shehata, Adarkwah, Bozkurt, Hickey, Huang, Agyemang (2023).	What if the devil is my guardian angel? ChatGPT as a case study of using chatbots in education.	Australia	Qualitative	This research offered a strong foundation for bringing to light the issues surrounding using chatbots, particularly ChatGPT, in the classroom among those who adopted early. One-step research could be the main focus of future studies. Moving forward, we can use ChatGPT in instructional strategies and look into how, in addition to the improvements and results provided to the education field, human tutors and machines (ChatGPT) could collaborate to accomplish an educational goal.	This study examines ChatGPT, an AI chatbot developed by OpenAI in education. In three stages, the research reveals positive public discourse, concerns about educational transformation, and issues like cheating, honesty, misleading privacy, and manipulation. The findings provide research directions for a safe and responsible adoption of ChatGPT in education, highlighting the need to consider user experiences and ethical considerations carefully.
Williamson, Molnar, Boninger (2024).	Time for a Pause: Without Effective Public Oversight, AI in Schools Will Do More Harm Than Good.	USA	Qualitative	Although AI applications in schools are promoted as answers to difficulties with teaching and learning and	School administrators should hold off on using AI applications until lawmakers have had a chance to educate themselves on the technology fully and have drafted laws and

				administrative procedures, they come with risks, concerns, and restrictions. Potential advantages are less important than potential drawbacks when AI is used in schools since it increases the possibility of problems being replicated or worsened.	regulations that will allow for efficient public monitoring and control.
Hasanein and Sobaih (2023).	Drivers and Consequences of ChatGPT Use in Higher Education: Key Stakeholder Perspectives.	Saudi Arabia and Egypt	Qualitative	ChatGPT has drawn interest from higher education stakeholders because of its potential for teaching, learning, and student support. Quick response, ease of use, classroom support, problem-solving, data analysis, concept clarification, adaptive learning, assessment activities, and additional learning materials are among the twelve main factors identified by the study as motivating the usage of ChatGPT in educational settings. Test preparation, research	It is recommended that teachers update their take-home tests and rubrics by including student-generated content and providing comprehensive instructions. Since ChatGPT is still in its infancy, more studies are advised to fully comprehend its advantages and disadvantages for teachers and students.

				assistance, and language editing and proofreading are other motivators. The most frequent motivators are speed and ease of use, but students are also drawn to ChatGPT for adaptive learning, problem-solving, and data analysis. With its constructivist methodology, ChatGPT enhances learning by providing individualized instruction. Additionally, it provides a transformative method for data analysis and problem-solving consistent with constructivist learning theory.		
Basha (2024).	The Negative Impacts of AI Tools on Students in Academic and Real-Life Performance.	India	Qualitative	The growing usage of AI tools in education negatively impacts students' academic performance. Overreliance on AI may result in losing traditional skills like math, penmanship, and critical thinking abilities. It is important to address ethical	The possible advantages and disadvantages of AI tools for students' academic and real-world performance are covered in the article. Although AI increases productivity and provides individualized learning experiences, it can also impair critical thinking, creativity, and problem-solving abilities. In order to encourage well-rounded development, legislators, parents, and educators must	Enabling Academic Dishonesty through AI tools.

				<p>issues like data misuse and privacy. Students' academic performance and cognitive development may be impacted by biases and mistakes in AI systems. Promoting the usage of AI can help allay these worries and protect the rights and welfare of students. For an academic atmosphere to be holistic, these issues must be addressed.</p>	<p>acknowledge these constraints and enact rules.</p>	
<p>Seo, Tang, Roll, Fels and Yoon (2021).</p>	<p>The impact of artificial intelligence on learner–instructor interaction in online learning.</p>	<p>South Korea</p>	<p>Quantitative</p>	<p>AI analytics can assist teachers in understanding the performance and potential of their students. However, instructors and students may view AI's effects negatively, citing discriminatory practices and privacy violations. In addition to advocating for greater participation in communication and educational applications outside of the classroom, the AI in education group is investigating the effects of AI</p>	<p>The study suggests that AI systems should ensure explainability, human-in-the-loop, and careful data collection to minimize negative impacts on learner-instructor interaction. It suggests that AI systems and humans will work closely together in online learning but with consideration of perceived advantages and disadvantages.</p>	

				systems on online learning. Studies have revealed a deficiency in critical analysis about the hazards and ethical implications of AI systems on student-teacher interaction, and they urge more investigation to pinpoint any gaps or obstacles.	
Guilherme (2019).	AI and education: the importance of teacher and student relations.	London	Qualitative	By elevating education as Erziehung, or skill or trade learning, above Bildung, or character formation, the technologisation of education has had a profound effect on educators and instruction, impairing students' ability to care for others and participate in social issues.	At both the Erziehung and Bildung levels, when people comprehend the moral significance of being a moral person, Buber highlights the value of education that reveals hidden facets of a student's knowledge.
Almaiah, Alfaisal, Salloum, Hajjej, Thabit, El-Qirem, and Al-Marooof (2022).	Examining the Impact of Artificial Intelligence and Social and Computer Anxiety in E-Learning Settings: Students' Perceptions at the University Level.	Saudi Arabia, Jordan, Oman, and Malaysia	Quantitative	Artificial intelligence anxiety (AIA), a concern that assesses students' perceptions of AI technology, has been the subject of recent research. Since AI technology is predicted to advance quickly, lowering AIA levels could encourage its	The study reveals increased anxiety in e-learning environments negatively impacts learners' learning outcomes. Cooperative learning environments reduce anxiety by making learners feel more relaxed and comfortable sharing information. Traditional classrooms may increase anxiety levels. Higher interaction levels can reduce social anxiety in learner-learner and learner-

				<p>application. Computer anxiety, which comes in a variety of hardware and software forms, is not the same as AI anxiety. Several factors, such as concerns about privacy violations, bias in behavior, job replacement, learning, existential risk, ethics violations, artificial consciousness, and a lack of transparency, influence anxiety about AI. AI technology significantly affects learners' capacities and self-efficacy and is based on autonomous decision-making.</p>	<p>instructor interactions. Computer anxiety is related to individual anxiety about using technology and does not interact with social anxiety. The study hypothesizes seven hypotheses for each relation and will distribute a questionnaire among graduate students.</p>
Kalvaitytė (2023).	Unregulated Negative Impacts of AI: Mixed Methods Analysis of Feedback Responses to the EU AI Act Proposal.	European union	Mixed method	<p>The negative impacts of biometric and AI technologies include discrimination, behavioral chilling, surveillance, manipulation, and social effects like political outcomes, polarization, and misinformation. Individual impacts include autonomy, risks,</p>	<p>By focusing on the cause or effect level, the detrimental effects of AI on people and society could be lessened. Since there is no proof that manipulating AI and biometric identification systems is effective, they might be banned. However, stakeholders in the industry can object to this. Creating safeguards against adverse AI effects and redress channels is a better action. New rights, including the freedom from manipulation or the</p>

				and algorithmic management systems. Societal effects include monopolization of education, labor market polarization, and surveillance. Children's impacts are not generalizable, but human rights violations are identified. Addressing these impacts depends on EU determination from the Commission, EP, and Council.	ability to refuse AI treatment, may fall under this category. The AIA ought to think about creating new legal rights for the effects of AI on society.
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Despite its negative effects, using AI in education still has positive effects, as stated in the literature mentioned above. It can customize the student's learning experience to cater to their strengths and weaknesses, which will greatly improve their academic engagement and achievements. Additionally, by automating assessment and grading processes, AI can save teachers time and effort while providing students instant feedback. While AI can save time for teachers and students, giving them a chance to relax or take a day off is a luxury.

It is important to note that AI is not really the solution for everything and that we must always act cautiously to avoid and prevent issues that will arise. Examples of these issues, like authenticity, academic dishonesty, etc., are stated in the table above. To be able to address these issues, students must always act with an open mind. That is why, in the case of academic dishonesty, we should openly communicate with students and teachers about how AI is used in the learning process. Encourage discussions about the benefits and limitations of AI in education. Furthermore, in the case of plagiarism, establish clear guidelines on acceptable AI usage in assignments, including proper citation practices when utilizing AI tools. Develop strategies to detect AI-generated content that could be used for plagiarism.

CONCLUSION

With all the literature presented in this review, it is well-known that AI can be useful in a world where everything has been digitalized. AI has surfaced numerous times in business, healthcare, services, and even the building sector. It has promised increased productivity, enhanced security, and improved project management skills in education and academics, particularly for students who have tons of unfinished work and can sigh relief from having AI as their guide. The advantages of AI include identifying gaps in students' knowledge, tracking student progress, creating customized lesson plans, optimizing lesson quality, enhancing learning experiences, and, last but not least, improving student motivation. However, like all things in the world, there will always be good and bad things; that is why, without any proper guidance, there is a high chance that AI can damage your potential to grow and learn as a student.

Furthermore, the disadvantages of using AI are privacy and security concerns, reduced critical thinking, misinformation, and lack of motivation. All of this could damage your mental well-being and your data. There is a potential for unauthorized access to personal data, data breaches, lack of transparency in how data is used, biased algorithms based on potentially biased training data, covert data collection practices, and inadequate data anonymization. That is why students who rely too much on AI-generated content may develop reduced critical thinking skills, may be hindered from learning to express their unique ideas, and may dehumanize the learning experience, which can affect students' motivation. It may cause misinformation because the data it draws

from may be outdated or have errors. It is crucial that students have the discipline to use AI in the manner intended to be used, or else there will be consequences.

Henceforth, it is important to note that while students should be disciplined and cautious, teachers must also guide the students on how AI can be used in education. Teachers or administrators must compare the pros and cons of AI to determine what would give you the best chance of getting the education you truly deserve, giving you the chance to reach your full potential. This can create an environment where integration supports meaningful learning experiences and a promising future for all students.

RECOMMENDATION

Based on all the information the researchers collected, artificial intelligence (AI) can occasionally be useful by enabling our students to rely on it for answers more conveniently. In connection with this, artificial intelligence surpasses the educational system in intelligence. By teaching young learners, alongside their parents and teachers, to not rely only on artificial intelligence, this research gives us confidence that each student will not depend on other AI tools in the future and will likely be able to answer questions independently.

AI can support academic endeavors by offering study resources and participating in educational dialogues. However, students may become reliant on digital tools due to the rapid reaction time of AI tools like chat and GPT, which raises the possibility of plagiarism. This is due to AI's improper author or source attribution, which makes plagiarism more likely. Students must be cautious not to rely on AI, which may result in bias, job displacement, and privacy issues.

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