

Empirical Paper

The Rise of AI Tools in Classrooms: Threat or Opportunity for Academic Integrity

Moshood Abiola Sadudeen^{1*}, Hammed Olalekan Lawal², Abisola Olanrewaju Obasanya³

Affiliations

¹Lagos State University, Ojo

²University of Turku, Finland

³Arc-Lights Foundation

ORCID Identifiers

Abisola Olanrewaju
Obasanya
[0000-0002-0839-9533](https://orcid.org/0000-0002-0839-9533)

DOI

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Abstract

Purpose: The rapid integration of Artificial Intelligence (AI) into education has transformed learning by enhancing personalisation, efficiency, and accessibility. However, it has also raised concerns about academic integrity. This study examined the ethical implications, benefits, and risks of AI use in classrooms, focusing on learning processes, assessment practices, and student behaviour.

Methodology: A systematic literature review was conducted using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. Peer-reviewed studies published between 2014 and 2025 were retrieved from Google Scholar, SpringerLink, and Scopus. Forty-one eligible articles were critically analysed to identify the educational benefits and ethical challenges associated with AI tools.

Results: The findings indicate that AI technologies, including intelligent tutoring systems and generative writing assistants, enhance learning outcomes, engagement, and instructional efficiency. However, they also raise ethical concerns by blurring the distinction between legitimate academic support and misconduct while complicating the detection of AI-generated content. Inconsistent institutional policies and limited student awareness further increase the risk of academic dishonesty.

Novelty and Contribution: This review provides a comprehensive synthesis of the ethical challenges surrounding AI in education and explains how AI adoption reshapes academic values, accountability, and integrity. It offers original insights into balancing technological innovation with ethical educational practices.

Practical and Social Implications: The findings guide educators, policymakers, and technology developers to establish clear ethical guidelines, strengthen institutional policies, and improve student awareness. These measures can support the responsible integration of AI while preserving academic integrity and maintaining trust in educational assessment.

Keywords: Artificial Intelligence (AI), Academic Integrity, Systematic Literature Review, Ethical Implications, Classroom

*Corresponding author

E-mail address: abiolasadudeen@gmail.com

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1 Introduction

Artificial Intelligence (AI) has emerged as a pivotal component of contemporary educational paradigms, transforming the methodologies through which learners acquire knowledge and educators facilitate instruction and evaluation. As noted by Abah et al. (2025), AI currently assists an extensive array of educational applications, including personalised tutoring systems, automated essay evaluation, plagiarism detection mechanisms, immersive virtual reality experiences, and chatbot-assisted learning environments. Fitria (2021a) articulates that AI constitutes a form of technology that empowers machines to replicate human cognitive processes by analysing substantial datasets via sophisticated algorithms, thereby enabling them to discern patterns and autonomously render decisions.

Foltynek et al. (2023) noted that the European Commission defines AI systems as possessing “intelligent behaviour” and a degree of autonomy in the pursuit of predetermined objectives. Such tools are capable of generating textual content, musical compositions, programming code, and visual imagery, enhanced by advancements in machine learning and neural network architectures. While sanctioned utilisation of these technologies may augment educational experiences, their undisclosed or unauthorised application in academic submissions threatens the principles of academic integrity. This practice may constitute a form of academic misconduct, conferring disproportionate advantages upon certain students (Tauginienė et al., 2018).

The International Centre for Academic Integrity (ICAI, 2025) articulates the concept of academic integrity through six fundamental values: honesty, trust, fairness, respect, responsibility, and courage. The foundation of academic integrity is critical to the validation of educational qualifications and encompasses ethical practices such as original authorship, appropriate citation, and reverence for intellectual property (Abah et al., 2025). Educational institutions maintain these ethical standards through the establishment of clear policies, supportive academic frameworks, and robust disciplinary mechanisms.

AI-driven tools present significant advantages within the educational landscape. They facilitate learner-centred pedagogies, provide tailored feedback, and optimise assessment methodologies. For example, AI grading systems provide insights regarding grammar and coherence, subsequently alleviating the assessment burden on educators (Huang et al., 2023). According to Halaweh (2023), these advancements foster more adaptive and efficacious teaching methodologies that are likely to enhance educational outcomes.

However, this transformation engenders novel challenges. Generative AI tools, such as ChatGPT, have elicited considerable apprehensions regarding the integrity of academic pursuits. Gonsalves (2025) asserts that the accessibility with which students can generate content erodes originality and obfuscates instances of academic misconduct. Large language models (LLMs) like GPT yield responses that closely resemble human articulation, thereby blurring the distinctions between student-generated and AI-sourced content (Kumar & Mindzak, 2024). As noted by Hutson (2024) and Luo (2024a), this paradigm shift complicates conventional methodologies for evaluating learning outcomes and diminishes essential competencies in writing and critical analysis.

Before the advent of tools such as ChatGPT, the detection of plagiarism predominantly relied on the identification of copied material from preexisting sources (Nabee et al., 2020). Presently, educators encounter an unparalleled challenge in differentiating AI-generated content, which may not explicitly contravene traditional definitions of plagiarism, yet still compromises the principles of academic honesty. The collaborative nature of human-AI writing further complicates matters concerning authorship, ethical considerations, and regulatory enforcement (Kumar & Mindzak, 2024).

Further concerns pertain to issues of data privacy, intellectual property rights, and the potential for students to excessively depend on AI (Lund & Wang, 2023; Ray, 2023; Rodrigues, 2020). To mitigate these issues, students must receive training to critically assess AI-generated content and utilise these tools in an ethical manner (Chan, 2023; Tlili et al., 2023). In response, academic institutions are implementing workshops focused on academic integrity, revising codes of conduct, integrating AI literacy into educational curricula, and adopting alternative assessment strategies that prioritise creativity and analytical reasoning.

Notwithstanding the challenges, AI possesses the capacity to enrich educational experiences if wielded judiciously. The objective is not to dismiss AI tools but to ensure their incorporation reinforces rather than jeopardises the fundamental tenets of academic integrity. Educators and institutions must navigate the opportunities presented by AI while instituting robust safeguards that uphold academic credibility. By adopting this approach, they can cultivate a culture of ethical technology utilisation and equip students to interact responsibly with emerging digital resources.

The study reviews the dual influence of artificial intelligence (AI) tools on academic integrity within educational contexts, elucidating both the possibilities they offer for enhancing learning and assessment, as well as the challenges they present concerning academic misconduct, authorship, and ethical application.

Study Rationale

The rapid integration of Artificial Intelligence (AI) tools in education has transformed teaching, learning, and assessment through personalised support, automated feedback, and data-driven instruction (Fitra, 2021). While AI offers significant pedagogical benefits, its widespread use also raises ethical concerns (Alexander et al., 2023), particularly regarding academic integrity. Generative AI tools capable of producing human-like content challenge traditional notions of authorship and originality, increasing the risk of academic misconduct (Liu et al., 2024).

In response, there is a pressing need to examine AI's dual role as both an educational asset and a threat to integrity. The absence of clear institutional guidelines may exacerbate misuse. Therefore, establishing ethical frameworks for responsible AI integration is essential to preserve academic values. This systematic review aims to investigate the key factors influencing the impact of AI on academic integrity and to propose a sustainable framework for its ethical use in classrooms. The study seeks to provide insights that support responsible adoption by educators, institutions, and policymakers. The following research questions guide the review.

- i. What AI tools are currently being integrated into classroom settings, and for what educational purposes?
- ii. How has the use of AI tools affected students' adherence to academic integrity standards?
- iii. How do teachers and students perceive the ethical implications of using AI tools in learning and assessment?
- iv. What are the perceived benefits and risks of AI integration in relation to academic honesty, according to existing literature?

Conceptual Framework

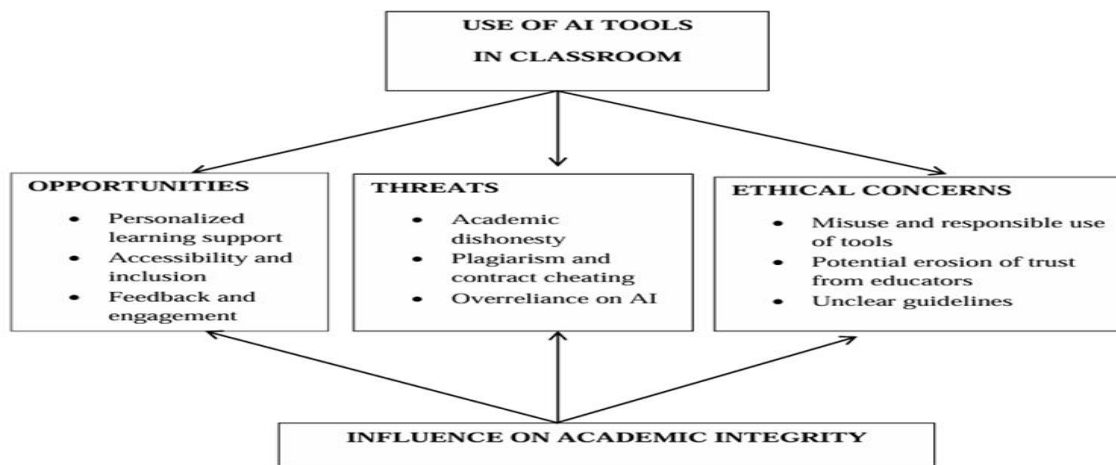


Figure 1 AI Usage in Classroom and Academic Integrity

Source Adapted from Abah et al. (2025)

Figure 1 explains the integration of AI tools in classrooms and the dimensions it uses to impact academic integrity. The conceptual framework outlined three major interlinked dimensions (opportunities, threats, and ethical concerns) that collectively influence academic integrity outcomes in educational environments. AI tools offer valuable opportunities for education by enabling personalised learning, real-time feedback, and greater accessibility, which support student engagement and instructional efficiency. When used ethically, they promote autonomy, collaboration, and deeper learning. However, these benefits come with risks. AI can be misused for plagiarism, contract cheating, and assessment manipulation, leading to academic dishonesty and reduced critical thinking. Its ease of use often

blurs the line between support and misconduct. These opportunities and threats raise serious ethical concerns. With unclear institutional policies, both students and teachers face uncertainty about acceptable use. Issues around fair use, ownership, and trust underscore the urgent need for clear guidelines and AI literacy initiatives in education.

2 Methodology

This systematic review adopts a rigorous methodology, involving predefined search strategies and systematic screening processes to ensure the inclusion of relevant and high-quality studies. By employing this comprehensive approach, the study aims to minimise bias and provide an in-depth understanding of how AI tools impact academic integrity in educational settings. The review focuses on exploring the dual role of Artificial Intelligence in classrooms, as both are a facilitator of learning and a potential threat to academic honesty.

The review process began with the identification of peer-reviewed articles related to AI in education, sourced primarily from the Scopus and Google Scholar databases using the Publish or Perish tool. The literature mapping followed four key phases: identification, screening, eligibility, and inclusion. Each phase was carefully implemented to ensure that selected studies directly addressed the research questions and contributed meaningful insights to the discussion on AI's role in academic integrity.

First Phase (Identification)

The database sources used for this systematic literature review are Scopus, Springer, and Google Scholar. The criteria for articles were published between 2014 and 2025. The Scopus database uniquely combines various scientific literature in education. The Google Scholar database is a free and accessible search engine that covers most peer-reviewed literature across multiple disciplines. Articles were identified through related keywords based on the three search engines required for the review, as shown in Table 1

Table 1 Keywords used to search for relevant articles

Databases	Keywords (Boolean Search string)
Scopus	"Artificial Intelligence" AND "Education" AND "Academic Integrity"
Google scholar	"AI in Classrooms" AND "Opportunity and Threat" AND "Academic honesty"
Springer	"AI-powered tools" AND "Perceived benefit and Risk" AND "Ethics in Education"

The next step involved determining the criteria for including or excluding studies from the review. This process ensures alignment with the study's objectives and guarantees that only research directly related to the role of AI in education and its impact on academic integrity is retained. The specific inclusion and exclusion criteria applied during the screening process are detailed in Table 2.

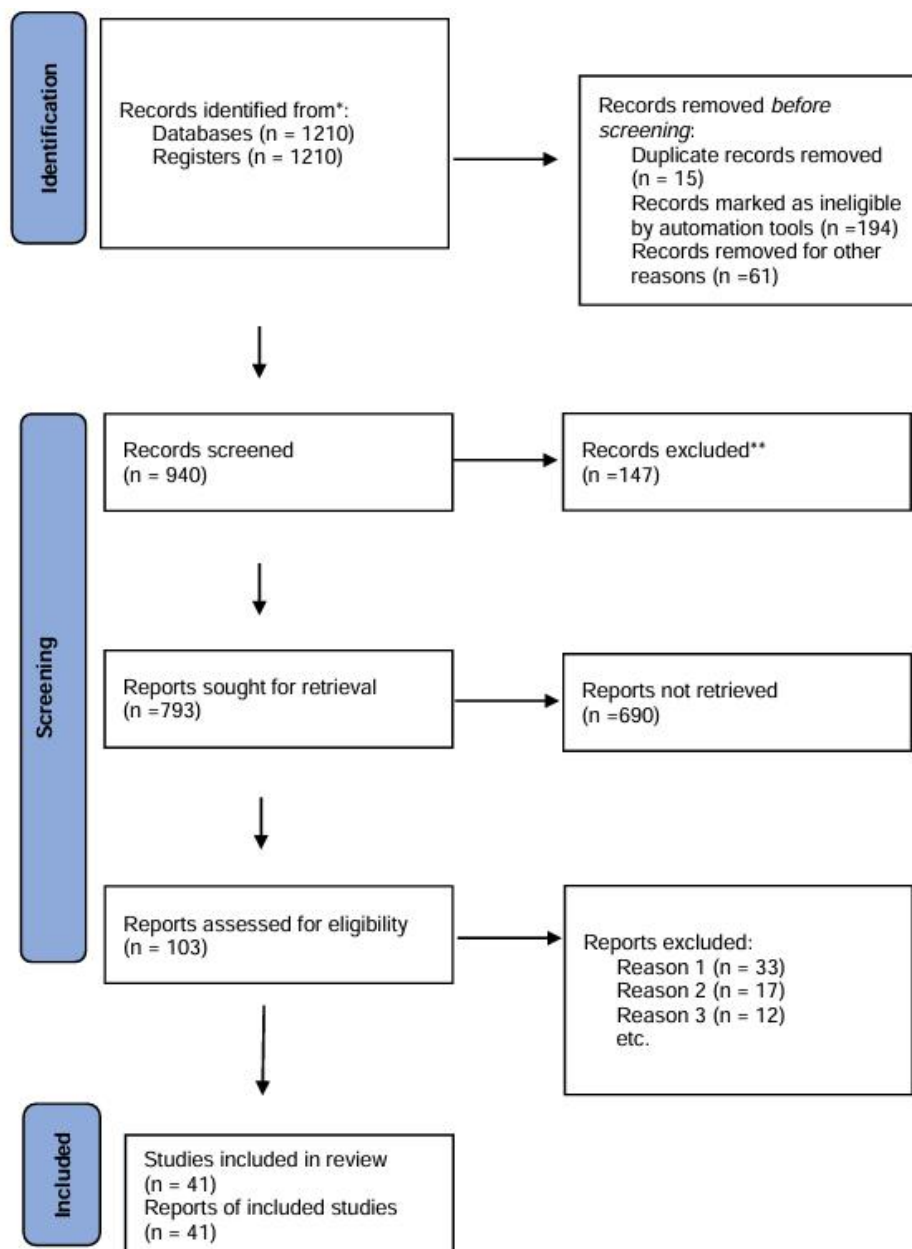
Inclusion & Exclusion Phase

The identified research publications underwent an inclusion phase, during which each article was reviewed to ensure alignment with the objectives of the study. The inclusion criteria (see Table 2) required the selection of English-language articles, with no restrictions on nationality, reflecting the global scope of the research. The time frame was set between 2014 and 2025 to focus on the most recent and relevant studies for the research.

In the exclusion phase, the titles and abstracts of the downloaded journal articles were evaluated to assess their suitability for inclusion in the review. Only those articles that met all the necessary criteria advanced to the next stage of the review. Exclusions were made for books, book series, book chapters, conference proceedings, and non-English articles (see Table 2).

Table 2 Inclusion and Exclusion Criteria

Criterion	Inclusion criteria	Exclusion criteria
Literature type	Journal Article	Book chapters, books, proceedings, reviews
Timeline	Articles published 2014-2025 (last 11 years)	Unpublished articles in 2014-2025.
Articles used	Article on Artificial Intelligence	Article on Artificial Intelligence
Country	Global	-
Language	English Articles	Non-English articles

**Figure 2** PRISMA flow diagram (Page et al., 2021)

The findings presented in this study are derived from a comprehensive review, encompassing 41 articles published from 2014 to 2025. A comprehensive breakdown of the data extracted from the articles can be found in Table 3

Table 3 Complete List of the Reviewed Selected Papers

	Author (s)	Title	Methodology	Researcher's Affiliation	Journal
1	Labadze et al. (2023)	Role of AI chatbots in education: systematic literature review	Qualitative	Kuwait US	International Journal of Educational Technology in Higher Education
2	Deng & Yu (2023)	A Meta-Analysis and Systematic Review of the Effect of Chatbot Technology Use in Sustainable Education	Qualitative	China	Sustainability
3	McCarthy et al. (2022)	Automated writing evaluation: Does spelling and grammar feedback support high-quality writing and revision?	Quantitative	US	Assessing writing
4	Yusuf et al.(2024)	Generative AI and the future of higher education: a threat to academic integrity or reformation? Evidence from multicultural perspectives	Quantitative	Nigeria Bangladesh Spain	International Journal of Educational Technology in Higher Education
5	Fitria (2021)	"Grammarly" as AI-powered English Writing Assistant: Students' Alternative for English Writing	Qualitative	Indonesia	Metathesis Journal of English Language Literature and Teaching
6	Liu et al. (2024)	Investigating students' cognitive processes in generative AI-assisted digital multimodal composing and traditional writing	Qualitative	New Zealand	Computers & Education journal
7	Hammond, et al. (2023)	A wolf in sheep's clothing? Critical discourse analysis of five online automated paraphrasing sites	Qualitative	New Zealand	Journal of University Teaching and Learning Practice
8	Choi et al. (2023)	Chatting or cheating? The impacts of ChatGPT and other artificial intelligence language models on nurse education	Qualitative	Hongkong	Nurse Education Today Journal
9	Parra and Calero (2019)	Automated Writing Evaluation Tools in the Improvement of the Writing Skill	Qualitative	Ecuador	International Journal of Instruction
10	Mohammadkarimi (2023)	Teachers' reflections on academic dishonesty in EFL students' writings in the era of artificial intelligence	Quantitative	Iraq	Journal of Applied Learning & Teaching
11	Alharbi (2023)	The use and abuse of artificial intelligence-enabled machine translation in the EFL classroom: An exploratory study	Quantitative	Saudi Arabia	Journal of Education and E-Learning Research
12	Alexander et al. (2023)	Who wrote this essay? Detecting AI-generated writing in second language education in higher education	Qualitative	Cyprus	Teaching English with Technology
13	Marzuki et al. (2023)	The impact of AI writing tools on the content and organization of students' writing: EFL teachers'	Qualitative	Indonesia	Cogent Education

		perspective			
14	Gültekin et al. (2023)	The influence of AI writing tools on the content and organization of students' writing: A focus on EFL instructors' perceptions	Qualitative	Turkey	CUDES Current Debates in Social Sciences
15	Bui & Tong (2025)	The Impact of AI Writing Tools on Academic Integrity: Unveiling English-Majored Students' Perceptions and Practical Solutions	Qualitative	Vietnam	AsiaCALL Online Journal
16	Baidoo-Anu & Owusu Ansah (2023)	Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning	Qualitative	Canada Ghana	Open Journal of Social Sciences
17	Latif et al. (2023)	Artificial general intelligence (AGI) for education	Qualitative	US	arXiv Journal
18	Wei et al. (2023)	The impact of automated writing evaluation on second language writing skills of Chinese EFL learners: a randomized controlled trial	Qualitative	China	Frontiers in Psychology
19	Wollny et al. (2021)	Are we there yet?—A systematic literature review on chatbots in education.	Qualitative	Germany	Frontiers in Artificial Intelligence
20	Eaton (2023).	The academic integrity technological arms race and its impact on learning, teaching, and assessment	Qualitative	Canada	Canadian Journal of Learning and Technology
21	Eaton et al. (2023).	Academic integrity and student mental well-being: A rapid review.	Qualitative	Canada	Canadian Perspectives on Academic Integrity
22	Ghafar et al. (2023)	The role of Artificial Intelligence technology on English Language Learning: a literature review	Qualitative	Iraq	Canadian Journal of Language and Literature Studies
23	Foltynek et al. (2023)	ENAI recommendations on the ethical use of artificial intelligence in education	Qualitative	Sweden Czech republic UK UAE Belgium	International Journal for Educational Integrity
24	Gulumbe et al. (2024).	Balancing AI and academic integrity: What are the positions of academic publishers and universities?	Qualitative	Nigeria	AI & SOCIETY
25	Khalil & Er (2023)	Will ChatGPT get you caught? Rethinking plagiarism detection	Mixed method	Norway	arXiv
26	Rodrigues et al. (2024)	Artificial intelligence: Threat or asset to academic integrity? A bibliometric analysis.	Qualitative	Portugal	Kybernetes.
27	Ahmad et al.(2021)	Artificial Intelligence and its role in education	Qualitative	Pakistan, Malaysia	Sustainability
28	Heffernan & Heffernan (2014)	The ASSISTments Ecosystem: Building a Platform That Brings	Qualitative	US	International Journal of Artificial Intelligence

		Scientists and Teachers Together for Minimally Invasive Research on Human Learning and Teaching.			in Education
29	Hwang et al. (2020)	Vision, Challenges, Roles, and Research Issues of Artificial Intelligence in Education	Qualitative	Taiwan China Australia	Computers and Education
30	Bakti et al. (2023)	The Role of Artificial Intelligence in Education: A Systematic Literature Review	Qualitative	Indonesia	Jurnal Iqra' : Kajian Ilmu Pendidikan
31	Brown (2020)	Language Models are Few-Shot Learners	Qualitative	US	ArXiv
32	Gonsalves (2025)	Addressing student non-compliance in AI use declarations: implications for academic integrity and assessment in higher education.	Qualitative	UK	Assessment & Evaluation in Higher Education
33	Lund et al. (2025)	AI and academic integrity: Exploring student perceptions and implications for higher education	Quantitative	US	Journal of Academic Ethics
34	Barrientos et al. (2024)	Discourse analysis on academic integrity and generative AI: Perspectives from science and mathematics students in higher education.	Qualitative	Phillipines	Environment & Social Psychology
35	Al Zaidy (2024)	The Impact of Generative AI on Student Engagement and Ethics in Higher Education	Qualitative	US	Journal of Information Technology, Cybersecurity, and Artificial Intelligence
36	Espinoza Vidaurre et al. (2024)	Perceptions of Artificial Intelligence and Its Impact on Academic Integrity Among University Students in Peru and Chile: An Approach to Sustainable Education.	Quantitative	Peru	Sustainability
37	Shalevska & Kostadinovska-Stojchevska, (2024)	Ethics in Times of Advanced AI: Investigating Students' Attitudes Towards ChatGPT and Academic Integrity	Mixed method	North Macedonia	Teacher
38	Wiredu et al. (2024)	Impact of Generative AI in Academic Integrity and Learning Outcomes: A Case Study in the Upper East Region	Mixed method	Ghana	Asian Journal of Research in Computer Science
39	Bongcac & Pabalan (2024)	Potentials, risks, and ethical implications in the utilization of AI-powered tools in education	Qualitative	Philippines	Ignatian International Journal for Multidisciplinary Research
40	Idroes et al. (2023)	Students' Perspectives on the Role of Artificial Intelligence in Education: A Survey-Based Analysis	Quantitative	Indonesia	Journal of Educational Management and Learning
41	Di Xu and Jaggars' (2014)	Performance Gaps between Online and Face-to-Face Courses: Differences across Types of Students and Academic Subject Areas	Qualitative	US	The Journal of Higher Education

3 Results

The study features the analysis of the methodologies explored in each paper, the publication year of the articles, and the authors' affiliations

Analysis for Methodology Description

The methodology section aims to present the methods adopted across all articles included in this systematic review. The analysis shows that 76% of the articles use the qualitative method ($n = 31$), 17% use the quantitative method, and 7% use a mixed-methods approach, combining qualitative and quantitative methods. These percentages represent 7 papers and 3 papers, respectively, as shown in Figure 3 below.

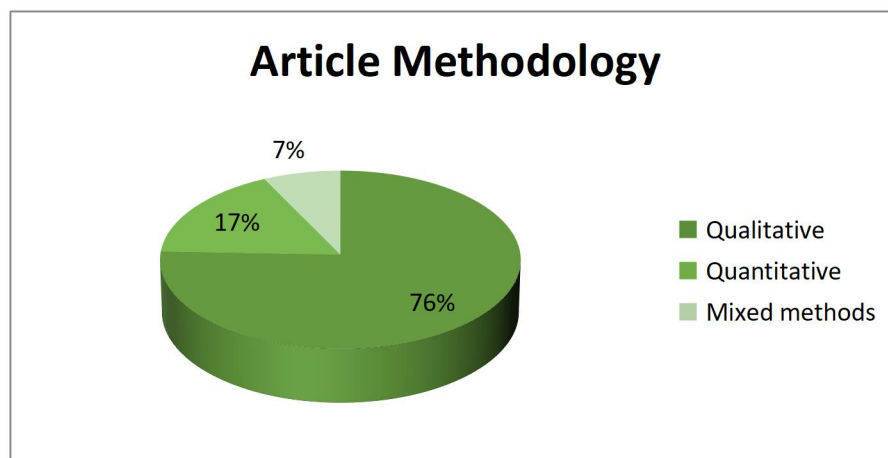


Figure 3 Methodology analysis

Year of Publications

The chart in Figure 4 shows how the articles are distributed by year, and that the majority of the articles are from the year 2023, followed by 2024, 2025, and 2021.

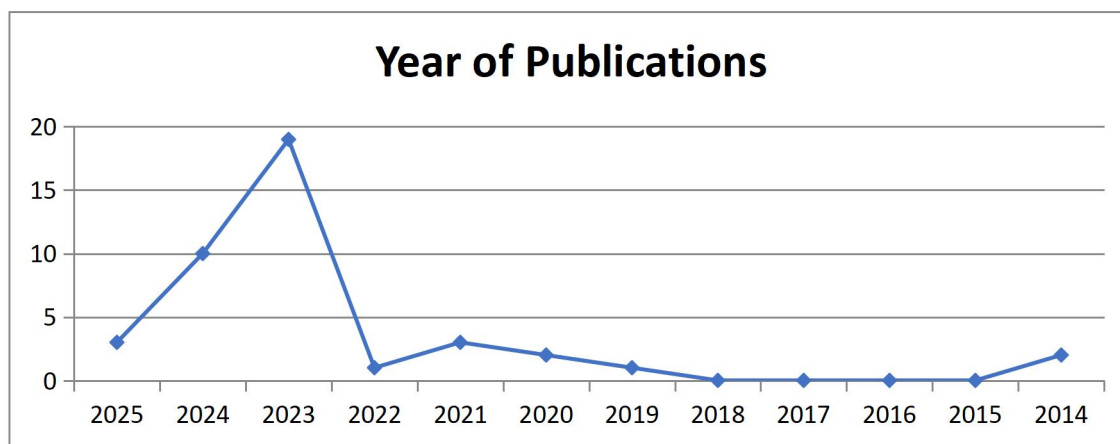


Figure 4 Distribution of publications by year

Research Country Affiliation

Academics from around the globe are curious about how educators and learners view AI use and their impact on academic integrity, as shown in Figure 5. The US accounted for the majority of the identified studies ($N = 7$), with

relevant research from Indonesia coming in second ($N = 4$). Canada and China each contributed three studies ($N=3$), while Nigeria, New Zealand, Iraq, Ghana, the UK, and Philippines each contributed two studies ($N = 2$), and the remaining countries only had one study piloted. These countries include Kuwait, Bangladesh, Spain, Hong Kong, Ecuador, Saudi Arabia, Cyprus, Vietnam, Germany, Sweden, the Czech Republic, UAE, Belgium, Norway, Portugal, Pakistan, Malaysia, Taiwan, Australia, Peru, and North Macedonia.

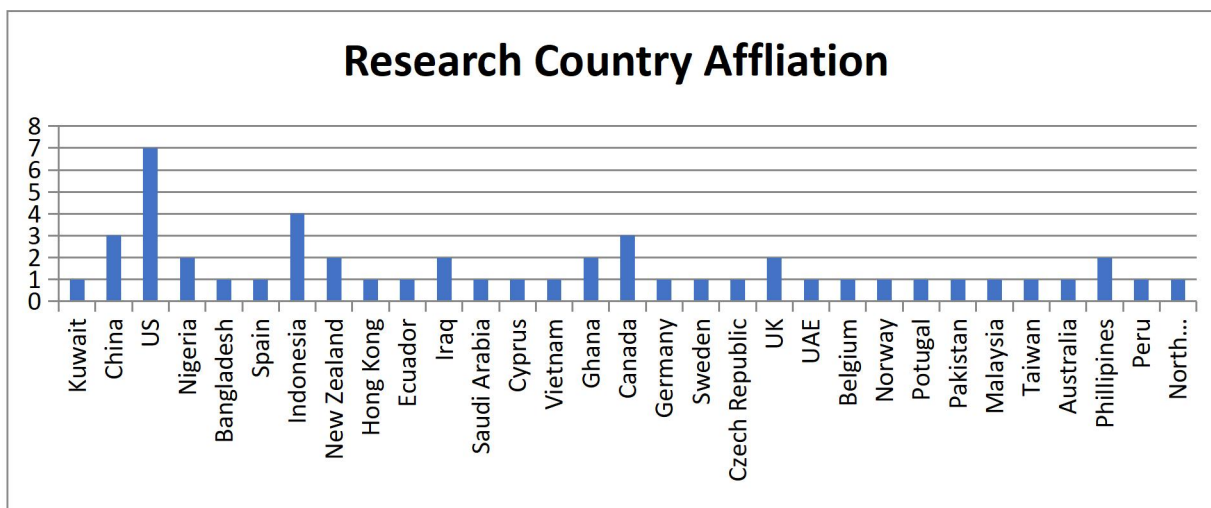


Figure 5 Articles by country

4 Discussions

Research Question 1: What AI tools are currently being integrated into classroom settings, and for what educational purposes?

The integration of artificial intelligence (AI) into classroom settings has seen a remarkable increase, reshaping various dimensions of educational practice, including instructional delivery, assessment, learner engagement, and academic support. This discussion synthesises current trends, practical applications, and the implications of diverse AI tools in contemporary educational contexts.

Fitra (2021) explained that AI tools are increasingly being deployed to enhance instructional delivery. Virtual learning platforms such as Blackboard facilitate content distribution, assignment management, and student–instructor interaction while voice-activated assistants like Siri and Google Assistant support autonomous learning by allowing students to access educational resources via voice queries. Additionally, smart content tools such as Cram101 and Netex Learning offer adaptive digital textbooks and multimedia content, enabling personalised instruction aligned with curriculum requirements. These innovations are complemented by tools that improve accessibility, such as presentation translators, and MOOCs like Coursera, Udemy, and Google AI, which personalise learning paths and monitor progress, particularly for diverse and global student populations.

Additionally, Liu et al. (2024) and Choi et al. (2023) emphasised that the growing accessibility of the internet has expanded the accessibility of generative AI technologies such as writing assistants and chatbots. Tools like ChatGPT, Jasper, Wordtune, Writesonic, and Claude are now integral to students' academic routines, offering support in composing essays, summarising content, and enhancing language quality. Such AI writing tools include grammar and spelling checkers, content generation tools, paraphrasing tools, machine translation tools and many more.

Grammar and spelling checkers include tools like Grammarly, ChatGPT, and Microsoft Office's auto-correction feature. They are widely used for identifying grammatical and spelling errors. While studies have confirmed their effectiveness (K.S. McCarthy et al., 2022), scholars have raised concerns regarding their limitations in addressing deeper linguistic issues and their potential to impede learners' development of editing skills (Cabal, 2022; Ismail, 2024). Paraphrasing Tools include QuillBot and Paraphraser.io, and they enable learners to rephrase content while preserving meaning. However, over-reliance on such tools raises ethical concerns related to citation and academic integrity (Burkhard,

2023; Yusuf et al., 2024). Also, machine translation tools are widely used by language learners; platforms like Google Translate and Deep Learning continue to improve in accuracy and fluency, making them valuable for comprehension and cross-lingual communication (Alharbi, 2023; Mahdi & Sahari, 2024; Sutrisno, 2020).

AI's impact extends into the domain of intelligent tutoring systems (ITS). Tools like Auto Tutor and cognitive tutors have been developed to support disciplines such as mathematics, physics, and computer literacy through dialogue-based, real-time instruction (Ahmad et al., 2021; Chen et al., 2020). Heffernan and Heffernan (2014) noted that by integrating feedback mechanisms and analytics dashboards, these platforms offer a more personalised and data-driven approach to teaching and learning (Malik et al., 2019; Yang & Zhang, 2019). An emerging but less explored concept is that of AI as a simulated learner. While rarely implemented, the idea suggests that human learners could improve their own understanding by teaching AI systems — an approach linked to higher-order cognitive gains (Hwang et al., 2020). However, early experiments, such as Microsoft's Tay chatbot, highlight the risks of unsupervised AI learning in public discourse and the ethical imperatives of incorporating safeguards (Wolf et al., 2017).

Furthermore, in the online assessment aspect, AI tools have begun to redefine assessment practices. Platforms like Keajarcita automate test creation and grading processes, alleviating instructor workload and ensuring timely feedback. Meanwhile, personalised learning platforms such as Ruanguru dynamically adjust content in response to individual learning styles, thereby enhancing student engagement and academic outcomes. Gamified educational tools, including Duolingo and Habitica, integrate behavioural reinforcement mechanisms into learning activities. These tools promote both cognitive and affective development by embedding learning tasks within game-like experiences, thus fostering sustained learner motivation and progression.

Finally, beyond classroom settings, AI tools have also been employed in educational policymaking (Bakti et al., 2023). Data analytics and machine learning models enable policymakers to identify systemic patterns, monitor progress, and anticipate challenges, thereby supporting more evidence-based and adaptive governance (Gasser & Almeida, 2017; Goralski & Tan, 2020; Tsai et al., 2019).

Research Question 2: How has the use of AI tools affected students' adherence to academic integrity standards?

The integration of AI tools into academic settings has significantly reshaped students' engagement with academic integrity. Brown (2020) elucidates a transition from integrity violations being predominantly associated with students possessing privileged access to external services, to a more egalitarian framework facilitated by freely available tools such as ChatGPT. This newfound accessibility has expanded the potential for academic misconduct across diverse socio-economic strata.

Despite this heightened accessibility, a considerable number of students underreport their use of AI technologies due to ambiguous institutional regulations, concerns about punitive measures, and inconsistent enforcement (Gonsalves, 2025). This ambiguity compromises transparency and institutional initiatives aimed at preserving integrity. Lund et al. (2025) further demonstrate that students' interpretations of integrity vary according to the extent of AI use: whereas entirely AI-generated submissions are predominantly regarded as unethical, partial use (e.g., for ideation or refinement) occupies an ethically ambiguous territory. Students' compliance is influenced by their personal ethical paradigms and perceptions of whether the use of AI constitutes an act of "cheating."

Within scientific and technical domains, a dual perspective persists: generative AI is perceived as a facilitator of learning while simultaneously posing integrity threats when improperly utilised (Barrientos et al., 2024). Similarly, Al Zaidy (2024) indicates that although 86% of students engage with AI tools, issues surrounding trust, equity, and reliance remain significant obstacles. Espinoza Vidaurre et al. (2024) underscore the imperative of incorporating AI literacy into educational curricula to address its ethical and societal implications.

Additional research corroborates these observations. Shalevska and Kostadinovska-Stojchevska (2024) note that students express a moderate level of comfort in employing AI tools such as ChatGPT, frequently without disclosure, due to academic pressures — an occurrence that raises substantial ethical dilemmas. Wiredu et al. (2024) report that 75% of students articulated concerns regarding academic integrity associated with AI usage, despite 72% acknowledging an enhanced comprehension of course material through such technologies. These conflicting

dynamics highlight the necessity for explicit policies, robust AI literacy, and ethical frameworks to facilitate the responsible integration of AI within educational settings.

Research Question 3: How do teachers and students perceive the ethical implications of using AI tools in learning and assessment?

The rapid integration of AI-powered tools within educational contexts has incited ethical dilemmas among both educators and learners, particularly concerning the issue of academic integrity. Instruments such as ChatGPT and automated paraphrasing applications provide enhanced efficiency and accessibility; however, their improper usage frequently obscures the distinction between legitimate academic assistance and deceitful conduct. Mohammedkarimi (2023) underscores that the involvement of AI in academic writing has facilitated plagiarism and various integrity infringements, while educators increasingly observe that students may circumvent genuine learning through an overreliance on AI-generated materials (Chan & Lee, 2023; Pudasaini et al., 2024). Numerous students may fail to perceive this improper use as unethical behaviour, particularly when AI is employed for paraphrasing or rewriting activities that often lack substantive critical engagement.

The complexity of AI tools further exacerbates this dilemma. Educators and researchers encounter significant challenges in differentiating between content produced by humans and that generated by AI, and existing detection methodologies have demonstrated limited efficacy, even among seasoned educators (Alexander et al., 2023). This uncertainty undermines the reliability of evaluations and engenders ethical ambiguity for both students and instructors.

A prominent apprehension pertains to the diminishing role of writing as an essential academic competency. While AI tools such as ChatGPT can augment learning, providing personalised feedback, authentic linguistic examples, brainstorming support, and automated grading (Hong, 2023; Sok & Heng, 2023), their user-friendliness may disincentivise intellectual exertion. For instance, Mizumoto and Eguchi (2023) discovered that ChatGPT evaluated over 12,000 ESL essays with an impressive 90% concordance with human assessors, also furnishing valuable critiques when solicited. Students express favourable perceptions of ChatGPT, frequently noting convenience, precision, and enhanced academic performance (Bonsu & Baffour-Koduah, 2023). Nonetheless, a substantial portion of their awareness is derived from social media platforms, particularly TikTok, where content predominantly extols AI for writing endeavours without addressing ethical considerations. Haensch et al. (2023) noted that numerous such videos even proffer strategies for circumventing AI detection software.

Merely prohibiting ChatGPT proves to be an inadequate solution. Haensch et al. (2023) advocate for proactive instruction regarding the responsible application of AI, its limitations, and associated ethical risks. In a similar vein, Mulaudzi and Hamilton (2025) report that educators are utilising AI-detection tools such as Turnitin, reconfiguring assessments to incorporate in-class assignments, and mandating disclosures of AI utilisation to maintain integrity. Educators also stress the importance of fostering students' critical thinking skills to ensure ethical interaction with AI.

However, excessive dependence on AI has been demonstrated to impair critical thinking, diminish engagement with subject matter, and undermine originality and argumentation capabilities (Marzuki et al., 2023; Gültekin Talayhan & Babayiğit, 2023). Bui and Tong (2025) warn that such reliance may ultimately jeopardise students' writing proficiency and intellectual independence.

Collectively, these findings highlight a shared concern over the ethical implications of AI in academic settings. While AI tools offer legitimate benefits, there is a growing consensus on the need for institutional policies that promote ethical use, reinforce academic integrity, and build digital literacy. By encouraging responsible engagement, educators can help students benefit from AI while safeguarding the core values of higher education.

Research Question 4: What are the perceived benefits and risks of AI integration in relation to academic honesty, according to existing literature?

The existing body of academic research articulates a robust view regarding the adoption of artificial intelligence in educational settings, outlining both benefits and new challenges, especially in the area of academic integrity.

On one hand, tools powered by artificial intelligence are extensively acknowledged for their pedagogical advantages. Investigations conducted by Parra and Calero (2019) and Wei et al. (2023) underscore the efficacy of grammar-

checking applications such as Grammarly, which serve as proficient writing aids, enhancing students' grammatical proficiency, lexical resources, and overall compositional mechanics through instantaneous feedback. In a similar vein, content-generating platforms such as ChatGPT, Gemini, and JasperAI have been demonstrated to facilitate the development of ideas, coherence, and argumentative structure within written discourse (Marzuki et al., 2023). Furthermore, students express appreciation for the accessibility and multi-functionality inherent in these tools, which amalgamate grammar correction, summarisation, translation, and content generation within a singular interface (Ghafar et al., 2023). When employed ethically, these attributes can foster autonomous learning and augment the quality of writing. This perspective is corroborated by findings from Idroes et al. (2023), who accentuated the role of AI as a virtual assistant that enhances instructional delivery and affords real-time academic assistance. Participants in their research indicated that AI enables continuous access to educational resources, thereby enhancing productivity and efficiency. These findings substantiate the assertion posited by Di Xu and Jaggars (2014) that tools driven by AI can enrich the educational milieu by providing consistent support and guidance. Moreover, Idroes et al. (2023) highlighted AI's pivotal contribution to educational equity by facilitating universal access, particularly for students with special educational needs.

Conversely, the literature concurrently articulates apprehensions regarding the potential misuse of AI and its ramifications for academic integrity. Although AI tools proffer efficiency and convenience, they may inadvertently promote academic dishonesty if students depend on them to autonomously generate complete assignments without appropriate attribution or comprehension. Khalil and Er (2023) illustrated this concern by evaluating 50 essays produced by ChatGPT. While conventional plagiarism detection systems such as Turnitin and iThenticate reported elevated originality scores for 80% of the essays, ChatGPT itself identified AI-generated content in 96% of instances. This divergence elucidates a deficiency within existing detection frameworks, suggesting that AI-generated content possesses the capacity to circumvent traditional plagiarism assessments, thereby presenting a challenge to the preservation of academic standards. Additional risks encompass the potential for student overreliance on AI tools, which may attenuate critical thinking, creativity, and substantive academic engagement. Bongcac and Pabalan (2024) underscored that excessive dependence on AI-generated concepts can engender academic lethargy and impair students' ability to formulate original arguments. They further articulated concerns regarding the challenges associated with verifying the authenticity of student submissions, alongside emergent issues pertinent to plagiarism and copyright infringement. These findings accentuate the imperative for academic institutions to confront the ethical utilisation of AI, ensure transparency in student outputs, and fortify academic integrity within an increasingly AI-infused educational landscape.

In consideration of these concerns, Labadze et al. (2023) contend that although AI tools possess the potential to confer benefits upon students and educators, educational institutions must proactively engage with the risks associated with academic integrity. They advocate for the enhancement of student awareness regarding digital disparities, the limitations inherent in AI, and the attendant ethical considerations. Furthermore, ongoing professional development for educators is critical to equip them with strategies for the responsible integration of AI within their pedagogical practices.

Overall, while AI tools offer promising educational enhancements, they also present new challenges that require thoughtful management to uphold academic honesty. Ongoing research and policy development are needed to ensure AI's integration supports learning without undermining the integrity of academic work.

5 Conclusion

This study explored how AI tools are being used in classrooms, particularly their effects on academic integrity, ethics, and learning outcomes. Applying the PRISMA method, it identified AI technologies like tutoring systems and generative tools that support learning but also raise ethical concerns. The findings reveal a shift from clear-cut academic misconduct to more ambiguous ethical issues, largely due to inconsistent policies and student confusion.

The study also reviewed how educators and students perceive the ethical use of AI, highlighting worries such as reduced critical thinking, difficulty distinguishing help from cheating, and challenges in identifying AI-generated content. Although tools and revised assessments have been introduced to manage these issues, the study argues that technical fixes are not enough. Instead, it emphasises the importance of clear institutional policies, digital literacy, and fostering ethical awareness. While AI offers benefits like better writing, increased efficiency, and broader

access, these must be balanced with concerns around authorship and originality. The study concludes that successfully integrating AI in education requires a comprehensive approach, combining innovation with integrity, backed by policy, training, and ethical guidance. It adds valuable insights into AI's dual role as both a support and a challenge to academic integrity, offering direction for institutions and future research.

Suggestion for Future Consideration

The growing integration of AI tools in classrooms presents both promising opportunities and pressing challenges for academic integrity. These technologies enhance personalisation, accessibility, and engagement, with studies reporting improvements in learner autonomy, reasoning, and knowledge acquisition. However, concerns persist around reduced motivation, critical thinking, and ethical awareness. Without intentional instruction and human oversight, overreliance on AI may erode essential academic skills.

To harness AI responsibly, educational institutions must adopt a balanced approach. Future research should explore regionally and culturally sensitive policy frameworks, clarify intellectual property rights surrounding AI-generated content, and develop advanced plagiarism detection capable of identifying nuanced forms of academic dishonesty. Additionally, understanding educators' and students' attitudes toward AI can inform effective training initiatives that uphold academic standards.

Practical Implications for Educational Practice and Policy

The thorough and methodical assessment of this study clarifies the critical role AI tools play in the classroom and how it impacts academic integrity. This study offers actionable guidance for educators, policymakers, and institutions to strengthen academic integrity amid rising AI use. Institutions should develop clear, course-specific AI policies with concrete examples of acceptable use and declaration practices. Rather than broad reforms, gradual implementation tailored to institutional contexts is recommended. Teachers' training is also essential for consistent communication and enforcement. Framing policies as growth tools, not just compliance measures, can foster transparency and trust. Introducing declarations in low-stakes settings, promoting peer mentoring, and encouraging regular policy reviews informed by research and feedback will support ethical AI use and keep institutions aligned with evolving technologies.

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Conflict of Interest

The authors declare no conflicts of interest.

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