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Exploring GenAI Integration in the Humanities in Higher Education: A Narrative Review

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Abstract

This article examines the transformative impact of generative artificial intelligence (GenAI) on humanities education in higher education. Motivated by the rapid adoption of large language models (LLMs) such as GPT, Gemini, Llama, and Claude, this article explores the opportunities, challenges, and ethical implications of integrating GenAI into teaching, learning, and academic research in the humanities. Using a narrative review approach, it synthesizes relevant literature on GenAI applications, opportunities, challenges, and ethical concerns across humanities education and research. It highlights how GenAI enhances personalized learning, automates research tasks, and supports multilingual education, while addressing challenges such as AI literacy, infrastructural readiness, and equitable access. Ethical concerns, including plagiarism, data protection, algorithmic bias, and over-reliance on AI, are critically analyzed alongside the need for robust governance policies, particularly in resource-constrained settings.

Keywords: generative artificial intelligence, higher education, humanities, AI literacy, academic integrity, ethical governance

1. Introduction

In a short period of time, generative artificial intelligence (GenAI) has swiftly permeated various industries, including higher education (HE) (Chen et al., 2020; Chu et al., 2022; Crompton & Song, 2021). This technology is hailed for its potentially transformative abilities, promising significant changes in various aspects of HE (Crompton & Song, 2021). With nearly all HE students having access to AI tools, students did not hesitate to embrace the technology (Alenazi, 2024).

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According to reporting in The Times, nearly half of Cambridge students surveyed reported using GenAI to translate texts from foreign languages into English (Sleator & Hennessey, 2023). This trend is particularly visible in foreign language education, where recent review evidence shows that GenAI is increasingly used for learning support, feedback, writing, speaking practice, and language-skill development (Griche & Bennis, 2026). Similarly, over half of HE students report regularly using GenAI tools, and nearly half of them are investing in paid features (Bharadwaj et al., 2024; Dempere et al., 2023; Stone, 2024). Furthermore, a number of students have expressed positive attitudes toward GenAI's use in HE (Khasawneh, 2023; Sarwari et al., 2024). This indicates that we might have reached a point of no return when it comes to integrating GenAI in HE, leaving us with only one course of action, which is to understand this novel technology and how we can effectively guide its integration (Aghaee et al., 2024).

GenAI has a lot of potential in higher education for both students and educators. It can provide personalized learning experiences that respond to individual needs and give immediate and adaptive feedback (Shetty & Hegde, 2024). GenAI can also provide students with round-the-clock support with academic tasks such as writing and summarizing (Park & Ahn, 2024). For educators and institutions, it provides opportunities to maximize efficiency and effectiveness by facilitating administrative and pedagogical tasks, curriculum design, and assessment (Napal Fraile & Badiola, 2024; Shetty & Hegde, 2024). However, successful integration of GenAI in HE also presents numerous challenges, such as infrastructural limitations, ethical concerns related to bias and academic integrity, lack of technical expertise, and resistance from students and faculty who may perceive GenAI as a threat to traditional roles (Isiaku et al., 2024; Labadze et al., 2023; Saaida, 2023; Saputra et al., 2023). Additionally, the lack of governing policies, especially in developing countries where resources are scarce, may further exacerbate existing inequalities (Kang, 2023).

Acknowledging the importance of these technologies is paramount for policymakers and educators aiming to advance and improve the quality of higher education. This article seeks to clarify the opportunities, challenges, and broader implications of integrating GenAI into humanities education. Accordingly, the review is guided by three questions:

(1) What opportunities does GenAI offer for teaching, learning, assessment, writing, and research in the humanities?
(2) What technical, educational, ethical, and equity-related challenges shape its integration into higher education?

(3) What institutional and governance responses can support responsible, effective, and equitable adoption?

2. Opportunities

Despite the fact that GenAI technology has only become widely accessible for a short period of time, several studies have pointed out its potential in higher education. These studies, however, emphasize different dimensions of that potential. Baidoo-Anu and Owusu Ansah (2023) and Sok and Heng (2023) synthesize prospective benefits for teaching, learning, and research, including personalized support and feedback. Kasneci et al. (2023) examine these educational opportunities alongside limitations associated with large language models, whereas Halaweh (2023) focuses on strategies for responsible implementation. Alser and Waisberg (2023), writing from an academic and medical perspective, temper these benefits with concerns about the use of ChatGPT. Taken together, this literature suggests that GenAI may improve student engagement and motivation, provide personalized and timely feedback, and support assessment practices, but that these benefits depend on the context and manner of implementation. The literature similarly distinguishes several forms of support for educators: Bozkurt (2023) and Firat (2023) frame conversational GenAI as a broader shift in university practice, Morgan (2023) and Paulus and Marone (2024) examine time savings in qualitative analysis, and Turobov et al. (2024) focus specifically on thematic-analysis workflows.

2.1. Teaching and Learning

Feedback in higher education faces numerous significant challenges, such as timeliness, scalability, relevance, and efficiency. In large classes, educators often struggle with providing relevant feedback to large numbers of students on time for the feedback to be effective (Haughney et al., 2020; Henderson et al., 2019). Moreover, students tend to find feedback that is timely, specific, and provided through learner-centered methods to be more effective and motivating (Ahea et al., 2016; Pereira et al., 2016). In light of these challenges, GenAI shows the potential of providing students with timely and personalized feedback that they can engage with at their own pace (Polakova & Ivenz, 2024).

Studies reveal that students who receive GenAI feedback show statistically significant improvement in their essay writing (Chan et al., 2025). It helps them identify areas for improvement and refine their skills (Polakova & Ivenz, 2024). In the same vein, immediate and personalized GenAI feedback reduces students' stress and anxiety levels (Akhtar, 2024; Klos et al., 2021), increases their motivation, interest, autonomy, and engagement (Asmar et al.,

2025; C.-C. Liu et al., 2025; Nazari et al., 2021; Oktarin et al., 2024; T. Yang, 2024), positively impacts their self-efficacy, and enhances their emotional well-being (Agarwal & Linh, 2021; Mohammed & Khalid, 2025; Sia et al., 2021).

GenAI feedback integration has also been shown to improve students' feedback literacy (Oktarin et al., 2024) and the quality of the feedback they provide to their peers (Guo et al., 2024). Another opportunity that GenAI provides is the ability to label, categorize, and analyze students' feedback in humanities courses. This allows for the identification of common themes and concerns, enabling quick and targeted intervention. Despite some slight inaccuracies, GenAI labeling and categorization of students' feedback remains highly accurate (Katz et al., 2023).

2.2. Assessment

The accessibility of GenAI tools has disrupted assessment in higher education, but the cited literature characterizes this disruption in different ways. Naidu and Sevnarayan (2023) emphasize the encroachment of ChatGPT on online assessment in distance education, Perkins (2023) foregrounds academic-integrity implications, and Overono and Ditta (2025) use the rise of AI as a broader rationale for redefining learning and assessment. Students and educators agree that GenAI heavily impacts summative assessment methods, particularly essays, short-answer questions, and multiple-choice questions, whereas methods like live and prerecorded presentations are the least impacted (Smolansky et al., 2023). Proposed responses also differ in emphasis: Chaudhry et al. (2023) call for revisiting student-performance evaluation, Gamage et al. (2023) stress the opportunities created by redesigned assessment, and Susnjak and McIntosh (2024) focus on threats to online-exam integrity.

Modern education systems require a holistic assessment approach that tests critical thinking, problem-solving, digital literacy, and creativity (Bryan & Clegg, 2019). Traditional assessment methods, which rely heavily on testing rote memorization, fall short of meeting modern requirements (Gundu, 2024). In contrast, GenAI offers novel and creative assessment possibilities (Wünsch-Nagy, 2025). However, when it comes to assessment, GenAI also offers opportunities that address challenges created by the introduction of the same technology.

GenAI-assisted assessment enables students to hone their self-assessment skills, enabling them to continuously evaluate their progress and understand their learning habits. This can help them develop metacognitive skills and become more autonomous learners (Crawford et al., 2023; Dai et al., 2023). Moreover, GenAI tools show high accuracy when evaluating students' mock interview questions, providing them with timely, actionable feedback, which has the potential

to sharpen students' communication skills, thus making them work-ready by the time they graduate (Uppalapati et al., 2025). To fully realize its potential in this context, further research with multimodal GenAI is required in this area, since current applications focus solely on assessing verbal output and disregard nuances related to visual cues such as facial expressions and body language.

Another potential of GenAI is in real-time interactive assessment that requires quick decision-making, making it difficult for students to have enough time to cheat on these exams. Additionally, these types of exams require higher-order thinking rather than simple knowledge retention (Gundu, 2024). When it comes to traditional assessment methods, GenAI grading of university students was found to be in high agreement with human graders in objective subjects. In some cases, it even resulted in a lower error rate; however, the use of GenAI to grade exams in highly subjective disciplines such as humanities remains concerning (Lee & Song, 2024). Additionally, in a study by Ennadir & Habiballah (2025), no significant difference was found between AI and human grading in the department of psychology; however, they found that AI scoring yielded higher grades than human graders in the department of French studies. This indicates a need for subject-specific validation across departments in the humanities rather than adopting a one-size-fits-all approach.

The potential of GenAI extends to simulating a PhD thesis defense committee, allowing students to prepare for their vivas using mock questions generated by GenAI. Initial findings reveal that GenAI is able to generate relevant questions that are easily understood by students; however, the questions seem to lack creativity and focus solely on the content of the thesis (Samuelsson et al., 2024). Additionally, undergraduate students seem to be willing to have their theses evaluated by a GenAI system provided that the process is transparent (Greiner et al., 2023). In the same vein, GenAI is able to generate exam questions that are just as appropriate, clear, and suitable as human examiners'; however, some of the questions were not as relevant. Furthermore, these questions are indistinguishable from questions created by human examiners (Cheung et al., 2023). This promises to alleviate educators' workload by automating routine tasks, allowing them to focus on students' higher-order critical thinking skills (Bozkurt, 2023; Firat, 2023).

2.3. Writing and Scientific Writing

Since the main medium of human-machine interaction in most GenAI tools is written commands and output, concerns have emerged about their effects on students' writing skills. The available studies point to related but distinct outcomes. Nazari et al. (2021) report evidence from a randomized trial of an AI-powered writing assistant, Guo et al. (2024) examine an AI-

supported peer-feedback approach, and Oktarin et al. (2024) connect ChatGPT use with writing development, engagement, and feedback literacy. Together, these studies suggest that well-designed classroom use of GenAI can enhance writing practice, although they do not evaluate identical tools or instructional conditions. Khoudri (2024) extends the discussion to students' productive language skills more broadly. At the level of textual quality, Moussa and Belhiah (2024) examine learner engagement with AI-assisted writing, while Polakova and Ivenz (2024) focus on the effects of ChatGPT feedback; their findings indicate potential improvements in grammar, creativity, conciseness, coherence, organization, and relevance. Muslimin et al. (2024) explore a different instructional use, showing how AI-generated images can serve as visual stimuli in creative-writing tasks.

When it comes to writing, in addition to in-classroom writing practice and tasks, GenAI has potential in thesis and scientific article writing. GenAI tools have outstanding abilities when it comes to the regeneration of existing content. However, their ability to generate authentic and original scientific work remains limited. This means that while these tools can reproduce existing works, they are unable to generate completely original scientific articles, thus unable to make notable scientific contributions (Lozić & Štular, 2023). This ability to reproduce existing works leads many students to use GenAI when writing literature reviews since it saves them time and simplifies what is usually a time-consuming and complex process (O'Dea, 2024; Y. Yang et al., 2024).

2.4. Research

One promising application of GenAI in research is in qualitative data analysis. Computer-assisted qualitative analysis is not a novel phenomenon. For decades, various tools have been used to retrieve, organize, and store large amounts of data (Turobov et al., 2024); annotate and assign codes to segments of data; search for specific keywords; and create visual maps for analysis and theory building (Weitzman & Miles, 1995). However, the actual task of sifting through the data and creating codes remains a time-consuming undertaking. Since novel GenAI tools require minimal effort compared to manual coding and are easy to use, making them tempting for researchers (Morgan, 2023).

Whether through the integration of GenAI in existing computer-assisted qualitative data analysis software (CAQDAS) or through the use of GenAI chatbots, GenAI promises to drastically reduce the time it takes to analyze large sets of data and provide insights in a fraction of the time it would normally take (Morgan, 2023; Paulus & Marone, 2024; Turobov et al., 2024). In some cases, GenAI achieved near-perfect agreement with human coders when identifying themes from large

data sets (Kaleta, 2024). Additionally, GenAI can identify themes that human researchers might overlook when working on large data sets (V. V. Lee et al., 2024). GenAI-assisted qualitative analysis also shows the potential for more transparency when reporting findings of the coding process and facilitates replicability of these analyses (Siiman et al., 2023). Moreover, it has the potential to enhance the efficiency of collaboration between multiple researchers; however, the enhanced efficiency can come at the cost of quality and code diversity (J. Gao et al., 2023).

Despite their promises, these tools are only able to scour data and describe what's there and what's not and provide preliminary descriptive themes and codes. They do not have the ability that human researchers have to critically analyze and describe complex elements like how and why (Nguyen-Trung, 2025; Paulus & Marone, 2024) or provide nuanced interpretive themes (V. V. Lee et al., 2024; Morgan, 2023). Moreover, due to the novelty of GenAI technology, there is a lack of standardized methodology on the use of GenAI in qualitative research (Christou, 2023). In order to address some of these shortcomings, a few frameworks and protocols have been developed to facilitate and enhance the reliability of GenAI-assisted thematic analysis (Goyanes et al., 2024; Nguyen-Trung, 2025; Turobov et al., 2024; Zhang et al., 2023).

Other potential applications of GenAI not covered above include the use of GenAI tools in transcribing historical records through handwritten text recognition (Kasperowski et al., 2024), transcribing video and audio files (Risang Baskara et al., 2024), cartographic design and mapmaking (Memduhoğlu, 2025), and streamlining administrative tasks (Al-Zahrani & Alasmari, 2024). Some researchers have also investigated GenAI's application in teacher training. One study found that by interacting in Socratic dialogue with GenAI, educators can sharpen their Socratic dialogue skills (Gregorcic et al., 2024).

3. Challenges

Despite the promising opportunities it provides, GenAI integration in the humanities is not without its challenges. It is clear that students have embraced the technology without much thought into the implications of what its downsides are. While some of these challenges reflect obstacles that could hinder successful GenAI integration in the humanities, others reflect negative consequences that could arise even after successful integration.

Some of the challenges addressed below are technical challenges related to infrastructure, GenAI tool development such as the accuracy of GenAI output, and algorithmic bias. Additionally, some issues present ethical concerns, such as AI-assisted plagiarism, privacy, and data protection. Other challenges are related to issues such as socioeconomic disparities and

cultural biases in the data GenAI is trained on. Another issue outlined below is the issue of over-reliance on GenAI technology.

3.1. AI Literacy

Digital literacy and AI literacy specifically present a daunting obstacle to successful GenAI integration. AI literacy refers to a set of skills that give students and educators the ability to effectively and ethically engage with AI technologies. Building on the concept of digital literacy, AI literacy encompasses foundational knowledge of AI concepts and techniques, confident engagement with AI in multiple contexts, and awareness of the social and ethical implications of AI use. AI literacy supports critical engagement with AI through the continuous evaluation of AI application and employment of AI to support problem solving and innovation (Ng et al., 2021). Working collaboratively with AI, an AI-literate individual is able to see the nuances of AI integration to ensure that the best outcome is being achieved.

Concerns have been raised about students and educators lacking the required AI literacy and being unfamiliar with GenAI technology. This could lead to cognitive overload and behavioral issues that could stand in the way of successful GenAI integration (Alenazi, 2024; Jamshed et al., 2024). To circumvent this, AI and digital literacy integration into curricula is essential (Vazhayil et al., 2019; L. Xu, 2021). Additionally, ongoing teacher training on AI skills serves the main purpose of equipping educators with the required skills to integrate GenAI into HE and serves a secondary purpose of passing on these skills to future generations of students.

3.2. AI Output Accuracy and Bias

GenAI output presents a significant challenge to practical application as it is not consistently reliable. Even the most advanced tools available are often prone to generating hallucinations and exhibiting biases. These tools occasionally confidently present factually incorrect or outright fabricated information in humanities scientific writing (Lozić & Štular, 2023). Sun et al. (2024) categorized AI hallucinations into 8 different categories: overfitting errors, logic and reasoning errors, mathematical errors, unfounded fabrications, factual errors, text output errors, and other errors that don’t fall under any of the previous classifications.

Another issue with GenAI’s scientific output is related to the reliability of the generated citation. Some GenAI tools exhibit a preference for citing older and highly cited publications from highly reputable journals. These tools also tend to rely solely on Google Scholar for citation reports, disregarding other databases (Petiska, 2023). Therefore, reliance on current GenAI tools for literature reviews exacerbates the Matthew effect, reinforcing a cycle where

well established research is amplified while emerging research remains unnoticed (Thompson & Hanley, 2018). Additionally, this practice could result in funding inequities (Allison & Stewart, 1974) and uneven allocation of resources across specific fields (Bol et al., 2018; Petersen et al., 2014). Moreover, GenAI frequently offers references in a relatively arbitrary manner, often pointing to further reading materials rather than providing citations that directly substantiate specific claims (Petiska, 2023).

GenAI's Western-centric development also risks perpetuating digital neocolonialism by imposing cultural hegemony, widening the digital divide, and marginalizing non-Western perspectives, as GenAI tools frequently display a neocolonial bias, further propagating neocolonial intellectual dominance (Lozić & Štular, 2023; Nyaaba et al., 2024). Multimodal GenAI tools frequently generate content that reinforces certain linguistic ideologies as well as social hierarchies and inequalities. de Almeida & Rafael (2024) argue that the biases exhibited by GenAI go beyond mere technical issues but are influenced by power dynamics inherent in data colonialism and contemporary capitalist systems. They assert that GenAI's visual output embodies Western ideology that has been shaped by centuries of colonization.

To alleviate some of the global power imbalances reinforced by AI-augmented digital neocolonialism and facilitate equitable benefit-sharing between the Global North and Global South, Kponyo et al. (2024) put forward a few strategies. First, the Global South should begin establishing regional excellence AI hubs and incentivizing local AI talent development and retention. Second, more consideration should be given to implementing and enforcing strong data governance frameworks and laws and advocating for ethical AI standards. Finally, further effort should be made to subsidize and expand digital infrastructures and foster equitable global partnerships. These recommendations are echoed by Arora et al. (2023), who urge policymakers to revise data protection frameworks to ensure transparency and confidentiality, focus on identifying marginalized groups impacted by AI use, and encourage global cooperation to ensure that marginalized populations contribute to the full pipeline of AI development and distribution.

3.3. Infrastructure Readiness and Equitable Access

Other issues that cannot be overlooked are issues related to infrastructure readiness and equitable access to AI. Even in developed countries, cost-related issues and resource limitations might prevent a number of people from accessing quality GenAI tools, thus increasing any existing inequalities (Xu & Jumaat, 2024). Additionally, infrastructure related restrictions such as internet speed, server capacity, and other logistical challenges could amplify other access

issues (Muniandy & Selvanathan, 2024). Institutions need to check if their infrastructure is able to support GenAI integration (Vazhayil et al., 2019). Moreover, regional restrictions and censorship that require supplemental complex steps to circumvent might place additional hurdles on successful GenAI integration (Liu et al., 2024).

3.4. Over-reliance

While GenAI may help students become more autonomous by reducing their dependence on educators (Darmawansah et al., 2025), it also creates a risk of dependence on the tools themselves. The literature approaches this risk from several perspectives. Alruwaili and Kianfar (2025) examine teachers' attitudes toward ChatGPT in language teaching, Hieu and Thao (2024) consider teachers' views of an AI-supported classroom task, Mizumoto et al. (2024) analyze linguistic patterns in ChatGPT-generated student writing, and Napal Fraile and Badiola (2024) investigate acceptance among trainee teachers. Although these studies differ in design and focus, together they show that concern about over-reliance extends across both student and educator contexts. The issue could prove severe because its effects may accumulate over time; the studies discussed below therefore examine distinct consequences rather than treating dependence as a single, uniform outcome.

Over-reliance on GenAI could reduce opportunities for collaborative learning and human-to-human interactions (Alshammari, 2024). In the long term, this could lead to a deterioration of students' soft skills and impede wider skill set development (Abduljawad, 2024; Aghaee et al., 2024). It could also result in students bypassing or skipping stages of the learning process, which in turn could result in a superficial understanding of the learning material (Isiaku et al., 2024). Moreover, it could diminish students' decision-making skills (Pokkakillath & Suleri, 2023). In order to mitigate some of the detrimental effects of over-reliance, GenAI tools should be used as supplemental tools rather than replacements and should be integrated with traditional learning methods rather than substitute them (Waziana et al., 2024; Yan et al., 2024).

3.5. Ethical Concerns

The introduction of GenAI into higher education presents a myriad of ethical issues that threaten the quality of education and research and the privacy of all individuals involved. As students increasingly use GenAI for academic purposes, sometimes without even realizing that GenAI is incorporated into tools that they are using, universities grapple with the implications on academic integrity and authorship originality. At the same time, reliance on inaccurate GenAI detection tools can be counterproductive and result in added issues rather than resolve them.

Furthermore, GenAI raises data privacy concerns in terms of accidentally interfacing with sensitive information or misusing personally identifiable information in the absence of ethical and regulatory structures.

3.5.1. *Plagiarism*

Since the main purpose of GenAI is to generate language that is indistinguishable from human language, fears about the plagiarism and originality of written texts rose immediately. However, it only took students a short time to embrace ChatGPT, with more than half of students using GenAI tools regularly and mainly for academic purposes (Oladokun et al., 2024; Singh, 2025; Sleator & Hennessey, 2023). While this rapid embrace raises some issues, a more concerning issue is that with the continuous integration of GenAI into various academic writing software, students might not even be aware that they are using GenAI in their work (Chan, 2023). Luo (2024) argues that while most universities have addressed the issue of GenAI-assisted plagiarism either implicitly or explicitly through policies, they have failed to address the changing concept of originality. He posits that this could potentially deter students from legitimate use of GenAI altogether.

The mere existence of GenAI has resulted in heightened suspicion among university educators, leading them to be more critical and question the authenticity of students' essays and answers (Farazouli et al., 2024). This has led to false accusations, with many GenAI detection tools falsely flagging human-written text as likely GenAI-generated text (Elkhatat et al., 2023), which creates trust issues to the point where students who were asked to discuss the results of their assignments likened the experience to vexatious legal proceedings (Gorichanaz, 2023). If not addressed, this erosion in trust could result in a deterioration in the relationship between students and educators.

Whether GenAI-generated text can be distinguishable by educators from human-written texts remains an obscure matter in the literature, with one study finding that reviewers correctly identified 68% of GenAI-generated abstracts; however, they misidentified 14% of the human-written abstracts (Gao et al., 2023). In another study, human reviewers were able to identify human-written texts with an accuracy rate of 64% and GenAI-generated texts with a rate of only 24% (Kumar & Mindzak, 2024). These findings highlight a challenge that is, in the opinion of the author of the present article, bigger than not identifying GenAI-generated texts, which is misidentifying students' texts as GenAI-generated texts, further exacerbating the mistrust discussed earlier.

With naked-eye identification of GenAI text proving insufficient (Hakam et al., 2024; Jakesch et al., 2023; Köbis & Mossink, 2021; Li et al., 2024; Sarvazyan et al., 2023), some have taken refuge in AI-powered plagiarism detectors; however, various studies show conflicting reports concerning the detection of GenAI-assisted plagiarism. For instance, in a set of scientific abstracts written in the 1990s, 5% of the abstracts were misidentified as GenAI text with a probability exceeding 90% (Rashidi et al., 2023). This is mainly due to the dynamic and constantly evolving GenAI technology sphere, as the performance of tools used to detect GenAI-generated text goes down considerably when trying to detect text generated by newer versions of large language models (Elkhatat et al., 2023).

When it comes to the reliability of GenAI-generated text detection, numerous studies point out that all of these detectors always fail to provide 100% detection accuracy and never fail to misidentify human text as GenAI-generated text (Alexander et al., 2023; Chaka, 2023; Cingillioglu, 2023; Gao et al., 2023; Ladha et al., 2023; Weber-Wulff et al., 2023). While these findings may seem discouraging, one promising study found that people who regularly use GenAI for writing related tasks identified GenAI-generated texts with near-perfect accuracy, outperforming every commercially available GenAI detector available (Russell et al., 2025). These findings underline the necessity of providing academic staff with training on the effective use of GenAI tools and regularly using them. These measures have the potential to equip academic staff with the essential skills needed to accurately identify GenAI texts.

In response to challenges emerging from GenAI-assisted plagiarism, some researchers have called for the development of clear and comprehensive policies and guidelines to frame ethical GenAI use in academic contexts (C. K. Y. Chan, 2023). However, in the same manner that Johnson-Eilola & Selber (2007) called for a recognition of texts constructed primarily from existing materials as a legitimate form of student writing, challenging the traditional hierarchy between original and borrowed texts, other researchers have called for a complete reconstruction of our view of originality in academic contexts and emphasized the need to allow AI and human collaboration to prosper (Luo, 2024; Wu et al., 2021). Similarly, others have called for a reduction in reliance on assessment methods where GenAI may be used to generate answers (Perkins et al., 2024).

3.5.2. *Data Security*

Another notable issue with GenAI integration in HE is that numerous researchers don't address ethical and data privacy issues sufficiently when conducting GenAI-related research, with a significant number neglecting to obtain proper ethical consent (Salas-Pilco et al., 2022).

Interacting with GenAI chatbots, students and educators could unintentionally expose sensitive information (Abd-alrazaq et al., 2023; Kronemann et al., 2023). If proper protection measures are not taken, this could lead to potential misuse, data leakage, malicious takeovers, and privacy breaches (Alawida et al., 2023). Similarly, these systems collect data that could include personal data such as voice recognition, personal characteristics, and habits. Moreover, data consented for collection could be sold off to third parties and used beyond the agreed-upon purpose, or combined with various data sources to reveal private information (Curzon et al., 2021).

In order to safeguard students, educators, and institutions' privacy and protect them from data breaches and targeted attacks, various strategies could be employed. First, governments and institutions should develop and enforce clear laws and policies to protect students' private data (Abisheva et al., 2024). Similarly, the way personal data is collected, processed, and stored should be revised with GenAI technology in mind (Kronemann et al., 2023). GenAI tool makers should be transparent about data collection practices, give users the ability to restrict how their data is handled, and give them the option to delete it at their discretion (Wu et al., 2024). Additionally, integrating GenAI and digital literacy into curricula will help students and educators critically and effectively navigate their way when using GenAI technology, potentially circumventing any data privacy issues (Risang Baskara et al., 2024).

4. Conclusion

This review shows that GenAI offers substantial opportunities for humanities education, including more personalized learning, responsive feedback, new assessment practices, writing support, and greater efficiency in selected research tasks. These benefits are inseparable, however, from challenges involving AI literacy, output reliability and bias, infrastructure and access, over-reliance, academic integrity, and data protection. Sustainable integration therefore requires institutions to combine investment in infrastructure and AI literacy with context-sensitive governance, transparent policies, equitable access, and disciplinary validation of GenAI applications. Future research should move beyond short-term adoption to examine long-term effects on learning, human interaction, cultural representation, and the development of students' critical and creative capacities.

As institutions begin to adopt, develop, or deploy sophisticated GenAI systems into their educational processes, it is important to emphasize the essential contribution of human judgment. Although GenAI systems can enhance numerous aspects of humanities education, they cannot replicate the depth of human insight, especially in cases where nuanced or context-rich input is required. Only a human can provide effective interpretation of nuance or cultural

sensitivities. The integration of technologies alongside human judgment is critical if an optimal sustainable educational experience is to be achieved and if the human experience of learning and teaching is to be upheld.

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