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An Academic Text: The Balance Between Academic Integrity and Artificial Intelligence

Liliia Ruskulis, Rymma Maiboroda, Olena Popova, Inna Rodionova, Olesia Olecsuk and Nataliia Ababilova

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Article abstract

This paper focuses on the connection between academic writing, academic integrity, and the fact that the application of artificial intelligence (AI) technologies in higher education is rapidly expanding, paying attention to the fundamental issue of the increasing reliance of students on AI-based technologies and the associated threat to the ethical conduct of scholarly activities. It is supported by the need to balance the pedagogical opportunities of AI with the preservation of critical thinking, originality, and responsible authorship in academic writing. In a qualitative study with a mixed design consisting of theoretical analysis, survey of students (n=248) and unstructured interviews of faculty (n=28), the authors establish the common patterns of AI use, perceptions of the students about integrity violation and the concerns of the teaching professionals about the disappearance of analytical and critical skills. The results indicate that, although AI makes academic work more accessible, personalized, and efficient, overreliance on generative systems leads to reduced cognitive effort, accidental plagiarism, and gray morality. The paper suggests a systematic, ethically aware approach to the integration of AI into higher education, with a focus on cultivating academic literacy, clearly defined institutional policies, and the pedagogic integration of AI use while preserving academic integrity standards.

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An Academic Text: The Balance Between Academic Integrity and Artificial Intelligence

Liliia Ruskulis
Admiral Makarov National University of Shipbuilding

Rymma Maiboroda
Military Institute of Taras Shevchenko National University of Kyiv

Olena Popova
Kyiv National Linguistic University

Inna Rodionova
Admiral Makarov National University of Shipbuilding

Olesia Olecsuk
Admiral Makarov National University of Shipbuilding

Nataliia Ababilova
Petro Mohyla Black Sea National University

Abstract

This paper focuses on the connection between academic writing, academic integrity, and the fact that the application of artificial intelligence (AI) technologies in higher education is rapidly expanding, paying attention to the fundamental issue of the increasing reliance of students on AI-based technologies and the associated threat to the ethical conduct of scholarly activities. It is supported by the need to balance the pedagogical opportunities of AI with the preservation of critical thinking, originality, and responsible authorship in academic writing. In a qualitative study with a mixed design consisting of theoretical analysis, survey of students (n=248) and unstructured interviews of faculty (n=28), the authors establish the common patterns of AI use, perceptions of the students about integrity violation and the concerns of the teaching professionals about the disappearance of analytical and critical skills. The results indicate that, although AI makes academic work more accessible, personalized, and efficient, overreliance on generative

systems leads to reduced cognitive effort, accidental plagiarism, and gray morality. The paper suggests a systematic, ethically aware approach to the integration of AI into higher education, with a focus on cultivating academic literacy, clearly defined institutional policies, and the pedagogic integration of AI use while preserving academic integrity standards.

Introduction

The search for innovative ways to involve students in scientific activities requires reevaluating the content of higher education. Students should actively participate in the learning process, fostering a desire and potential to conduct scientific research, attend various academic meetings and conferences in Ukraine and abroad, and present their scientific achievements in professional journals. These modern requirements for specialist training are outlined in the Laws of Ukraine *On Education*, *On Higher Education*, the State National Programme *Education* ("Ukraine of the XXI Century"), the State Programme *Teacher*, and the *Common European Framework of Reference for Languages*.

The development of Ukraine's higher education system, which has undergone significant changes during the Russian-Ukrainian war and is steadily integrating into the European educational space, demands high proficiency in academic writing among students. Academic writing is a key competency for any specialist in the modern world. The term "academic writing" originated in English-speaking countries in the late 20th century and was later introduced in Ukraine. At its core, academic writing revolves around the scientific text, which disseminates scientific knowledge and contributes to societal progress through the principles of academic integrity.

However, students' increasing use of artificial intelligence (AI) tools has raised concerns about academic integrity. Many resort to unethical practices that violate established academic standards. A thorough study of the challenges and opportunities associated with AI in education is essential for understanding its impact on academic integrity.

The article examines the impact of artificial intelligence on academic integrity in scientific writing.

Literature Review

The issue of maintaining academic integrity while using artificial intelligence technologies is a pressing concern in modern education and research. Notably, Levene (2023) provides a comprehensive analysis of authorship attribution as one of the key challenges in the use of language models. Lund and Wang's (2023) research generalized the impact of AI on scientific research, library activities, privacy concerns, and bias. Of particular interest within the scope of our research is the comparative study by Crompton and Burke (2023), which analyzes the use of AI technologies in higher education from 2016 to 2022. Spencer (2024) raises the challenge of identifying AI-generated texts, emphasizing that generating original content with minimal human effort poses a serious challenge to the academic community. He also highlights that even AI-detection programs are not foolproof, as they, too, are developed using AI. At the same time, the researcher proposes methodologies for verifying the originality of texts (Spencer, 2024). Attention should also be paid to King's (2023) research, which examines how students use AI and proposes task development strategies to mitigate AI-assisted academic misconduct. Cotton et al. (2023) and Sullivan et al. (2023) have focused their studies on OpenAI's ChatGPT, which they equate with

academic dishonesty. They argue that ChatGPT can create an unfair advantage for students who use it over those who do not, leading to inequitable assessment of knowledge (Cotton et al., 2023; Sullivan et al., 2023).

Several studies also represent the Ukrainian academic space. Notably, Palamar and Naumenko (2024) have identified the specifics of AI technology use among higher education students while adhering to academic integrity principles. Their research includes an analysis of current AI technology trends, an examination of its application in higher education, and an assessment of the ethical considerations surrounding its use (Palamar & Naumenko, 2024). Horchynskyi et al. (2023) emphasize that the misuse of AI can violate ethical research principles and academic integrity. They note that the emergence of ChatGPT in education has introduced new opportunities for manipulating academic standards and other aspects of the learning process. Tolochko et al. (2023) stress the importance of maintaining academic integrity among students and researchers in the modern era of AI-powered education and scientific activities globally and in Ukraine. These scholars have developed and proposed guidelines to ensure academic integrity when using AI, aiming to uphold ethical standards in education and research (Tolochko et al., 2023).

Research Methods

The research is based on a qualitative paradigm and employs the following methodologies:

- *theoretical methods:* analysis and synthesis of linguistic, pedagogical, and didactic sources related to academic writing; comparative analysis, generalization, classification, systematization, and theoretical forecasting to clarify key concepts and methodological principles regarding AI use in higher education;
- *empirical methods:* interviews with faculty, survey of students, observations of the educational process, and analysis of curricula, syllabi, and educational materials to assess the necessity of experimental research and to develop a methodological framework for AI integration in higher education; and
- *statistical methods:* analysis and comparative evaluation of experimental data.

Results

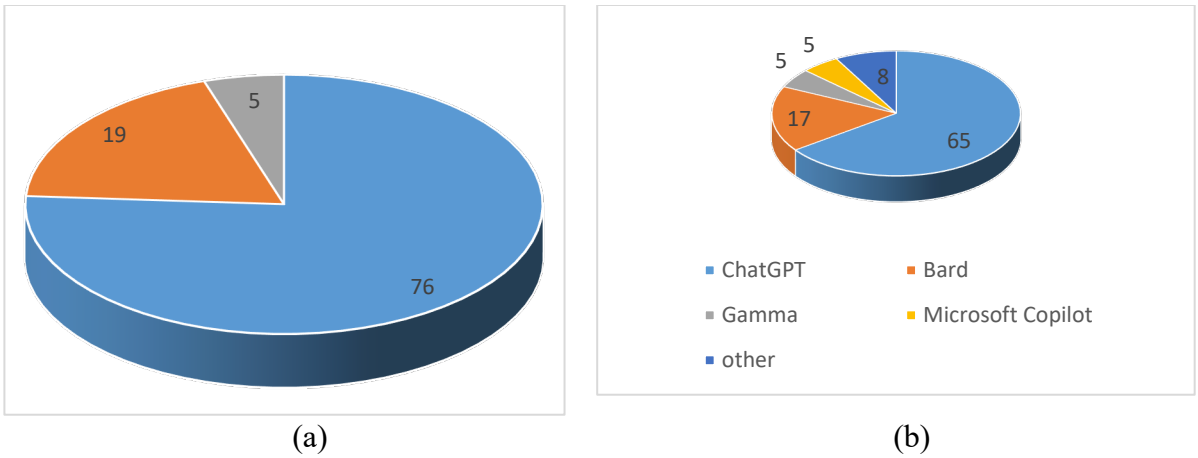
To explore the use of AI technologies in higher education institutions, we surveyed students from Admiral Makarov National University of Shipbuilding (Mykolaiv), Taras Shevchenko National University of Kyiv, Kyiv National Linguistic University, and Petro Mohyla Black Sea National University. A total of 248 students participated in the survey, representing both humanities and non-humanities disciplines at the bachelor's (first cycle) and master's (second cycle) levels. The survey was conducted online.

During the study, students were informed about the importance of adhering to the principles of academic integrity, including honesty (providing truthful information), personal responsibility, and commitment to achieving results. Additionally, respect and mutual trust were emphasized, along with educators' confidentiality in processing survey results. Other key principles highlighted included professionalism, competence, and objectivity in the presentation of the findings.

We surveyed students with the following questions:

1. Do you use AI technologies when preparing for classes or writing research papers?
2. Which AI technologies do you use?
3. Do you consider the use of AI technologies a violation of academic integrity?

The survey results revealed that 76% of respondents consistently use AI technologies, 19% use them occasionally, and 5% do not use them (Figure 1a). Responses to the second question showed that students primarily prefer ChatGPT (65%), followed by Bard (17%), Gamma (5%), Microsoft Copilot (5%), and other tools (8%) (Figure 1b). Regarding the third question, responses indicated that students perceive excessive reliance on AI as a violation of academic integrity. Zhai et al. (2024) identify overreliance on AI as the situation "when users accept AI-generated recommendations without question, leading to errors in task performance in the context of decision-making." According to studies, students' overreliance on AI dialogue systems, particularly those embedded with generative models for academic research and learning, has an impact on their critical cognitive abilities such as decision-making, critical thinking, and analytical reasoning (Alrazaq et al., 2023; De Angelis et al., 2023; Mbalaka, 2023). In particular, AI hallucinations in AI conversation systems are distinguished by the creation of false or misleading information (Hatem et al., 2023). Moreover, AI can generate texts based on its databases without reference to appropriate authors, which definitely creates an issue of unintentional plagiarism for a student. The lack of understanding of these concerns indicates overreliance on AI. Given that most respondents indicated that excessive reliance on AI violates academic integrity, 76% report consistently using AI technologies, raising additional questions about the nature of such use and necessitating further studies in this area. Morales-Garcia et al. (2024) created the Artificial Intelligence Dependence Scale (DIA). According to the authors, it "emerges as a robust and reliable tool for measuring university students' dependence on AI" (Morales-Garcia et al., 2024, p. 01). The DAI scale was developed using criteria adapted from compulsive behaviours or dependencies specified in the DSM-5. These criteria were divided into five main components: (1) Feeling of vulnerability and overcoming perceived uneasiness while missing access to technology means; (2) Concerns about relevance and performance are connected to performance anxiety and the desire to incorporate technologies in the working and academic context; (3) Need to keep an updated image that reflects the societal reason for the adoption of evolving technology; (4) Seeking external approval, demonstrating emotional dependency on these instruments for decision-making; and (5) Fear of personal obsolescence, taking into account the worry that technology automation would replace humans. However, we believe that while some elements of this approach (in particular, second and fourth) can contribute to measuring over-reliance on AI in writing academic texts, still the measurement model should be more approximated to students' overall perception of academic integrity and their comprehension of the importance of critical thinking, in particular concerning possible biases and ethical issues of AI tools. Development of such a measuring model was not included in the scope of our research, but it definitely should become an object of further investigations.



(a) (b)

Figure 1: The state of AI technology usage by higher education students (a); AI technologies used by students (b).

The survey results among higher education students indicate that they actively use artificial intelligence technologies in their preparation for practical and laboratory classes and in writing coursework and qualification papers, thereby violating academic integrity principles. These findings suggest that students should learn to use AI technologies wisely and ethically, citing them properly and specifying their purpose. AI tools offer a more personalized learning experience that can meet each student's unique needs.

In addition to the students' survey, we conducted unstructured interviews (without prearranged questions) with 28 teachers from the above-mentioned universities. We asked them to share their thoughts on the benefits and challenges of AI use in the context of academic integrity and the production of academic texts. Content analysis of answers, using elements of grounded theory (coding and categorization), revealed an evident lack of students' understanding of the real benefits of AI in learning, as they mostly use AI either to generate academic texts or to check grammar. In teachers' opinions, AI is a factor hindering the development of students' critical and analytical thinking. At the same time, teachers admit that the root cause of this situation is the lack of teachers' use of AI in the teaching process and the lack of explanation and demonstration to students of AI-based opportunities to enhance academic writing skills.

Discussion

Academic writing creates texts within academic discourse (Coffin et al., 2003). It is a form of expressing one's perspective on a subject while demonstrating knowledge and experience through critical thinking, interpretation, and presentation skills (Irvin, 2010). Creating and publishing a scientific text involves "the rational use of modern information technologies, as well as the direct engagement of the scientific community with new findings" (Vykhrushch, 2021, p. 113). It is a complex and multifaceted skill set that encompasses linguistic (grammatical, syntactic, and stylistic) aspects and meta-linguistic competencies such as logic, analysis, critical thinking, objectivity, and respect for other ideas and texts (Kuznetsova & Tarasova, 2017). Academic writing is also considered a broad skill set that cannot be fully covered within a single academic discipline (Babenko, 2016). The outcome of independent research, conveyed in writing, presents innovative solutions to problems (Nasminchuk & Hromyk, 2024). Furthermore, academic writing

is a linguistic competency that enhances one's ability to formulate and justify ideas effectively (Humennyi, 2022).

Scientists use a framework known as the "three P's" – process**,** product (a scientific text), and practice (the text as the outcome of individual effort and experience) (Dukhanina, 2018, p. 331). Revutska (2018) expands on this concept, identifying three additional "P's": personal process and practice**,** public product, and writing program, collectively defining an author's ability to create original scientific texts (p. 11). It should be noted that William Purkey and Betty Siegel's Invitational Theory highlights the need to invite people to realize their full potential consciously. Learning takes place in the social setting of invitational learning, where teachers should extend an invitation to students to reach their full potential (Haigh, 2011). Two theoretical underpinnings form the basis of invitational theory: 1) The Perceptual Tradition, which holds that each person's perception of the world shapes their conduct; 2) Self-Concept Theory, which holds that a person's self-perception mediates behaviour and that this self-perception both precedes and results from human behaviour. The educational process, defined by the so-called five P's: people, places, policies, programs, and processes, should be used to develop this human potential. The five Ps refer to environmental factors that, depending on their level of welcome, may determine whether a person succeeds or fails in the educational process (Gregory & Edwards, 2016). While AI can contribute to implementation of invitational learning (in particular, thanks to virtual learning environments, personalized and even Agile tutoring in producing academic texts), in case of inappropriate use it can become for a student a significant obstacle in developing his potential (which happens in case of overreliance on AI generative abilities and absolute belief in accuracy of AI answers to any question).

Bruce highlights that mastering academic writing involves several stages. These stages include developing key competencies to reconstruct the discourse of the subject under study, cultivating an authorial style and corresponding authorial identity, and developing critical competence, thereby enabling students to produce their scientific work (Bruce, 2015).

Furthermore, scholars such as Swales and Feak (2012), Hyland (2021) and Freedman (1998) clarify the key modern approaches to mastering academic writing, as illustrated in Figure 2.

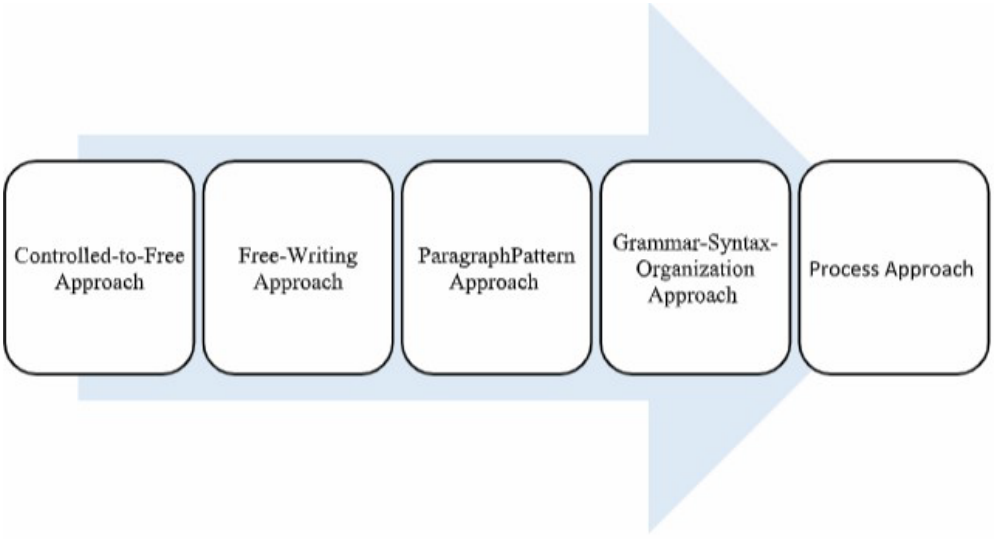


Figure 2: Approaches to mastering academic writing.

Analyzing scientific sources allows examining the advantages and disadvantages of these approaches. The controlled-to-free approach provides systematic practice in creating text elements, enhances the logical organization of material, and helps develop underdeveloped skills. However, it places excessive emphasis on form over content and follows a rigid template, leaving little room for creativity. The free-writing approach helps students overcome the fear of writing, improve writing speed, and develop writing habits. However, it is ineffective for students with low academic writing, as it often leads to neglecting grammatical rules. The paragraph pattern approach promotes literacy development and strengthens paragraph structuring skills. However, it does not emphasize form and offers limited opportunities for creativity. The grammatical-syntactic-organizational approach motivates students, helps them establish a connection between form and content, and encourages the spontaneous acquisition of language structures. However, it does not sufficiently focus on organizing text within a paragraph. The process approach simulates the creation of real-life text, considers audience needs and expectations, and teaches writing in multiple stages, fostering independence. However, it requires significant class time (Freedman, 1998; Hyland, 2021; Swales & Feak, 2012).

The process approach consists of several stages in text creation: prewriting – generating ideas, gathering information, and expanding knowledge; planning – organising the material (e.g., using infographics); writing/drafting – creating a preliminary version of a scientific text; revising/editing/post-writing – refining, editing, and finalising the text (Caplan & Douglas, 2012).

Examining the dichotomy between the product and process approaches is valuable, as each has distinct advantages. These approaches vary in scope, terminology, and application stages across different audiences. Their effectiveness depends on factors such as students' academic background, teachers' individual preferences, and the duration of the learning process (Dukhanina, 2018; Panchenko & Malynovska, 2017).

According to scholars, academic writing is closely linked to academic literacy, which encompasses metalinguistic competencies essential for research writing. As emphasized by Kozolup and Komar (2020), Serebryanska (2021), Nation (2001), Flowerdew (2000), Dudley-Evans (1998), Pearson Casanave (2004) and others, academic literacy integrates these competencies as a foundation for developing research writing skills. Researchers define academic literacy as the ability to communicate effectively in modern academic settings, including intercultural communication skills based on professional texts in English as the global language of academia.

The fundamental unit of academic writing is the scientific text. The analysis of scientific texts remains highly relevant for several key reasons. These include the process of globalization, which influences all spheres of public life, including science, the increasing role of intercultural scientific communication as a direct consequence of globalization, and the persistent scholarly interest in textual studies, particularly scientific texts, given their central role in communication. We are mainly influenced by the perspective of Semenoh (2010), who emphasizes that a scientific text is "a holistic communicative unit with a clear, logical structure, consisting of internally complete sections, subsections, subparagraphs, and paragraphs, enriched with appropriate terminology" (p. 63). Similarly, Surmin (2008) defines a scientific text as "a means of presenting scientific information and the result of scientific research. It is an intellectual product intended for the scientific community" (p. 5). Onufrienko (2012) describes a scientific text as "the highest communicative unit of scientific discourse, a verbal, holistic, and structured cognitive-communicative formation characterised by structural-semantic, compositional-stylistic, and functional unity, as well as a set of constant textual categories" (p. 336).

We also agree with scholars that the primary function of scientific texts is to generate and disseminate new knowledge. Such texts are a foundation for indexing information, creating databases and knowledge repositories, compiling translation, explanatory, and definitional dictionaries, and facilitating translation between languages (Pshenychna et al., 2008).

Scholars emphasize that the quality of a scientific text can determine the fate of the research, its reception by the scientific community, and its impact on the development of science. Many researchers widely cite and reference a well-written text, while a poorly written one may struggle to gain recognition within the academic community. As noted in the Methodology of Scientific Research lecture texts, "A well-structured and coherent scientific text enhances its visibility and influence, whereas a poorly composed text may hinder its acceptance and dissemination" (Deriy & Zosimenko, 2018, p. 80). The scientific literature identifies several key principles for structuring and composing high-quality scientific texts: content saturation, professional core, scientific informativeness, novelty, contextual completeness, problematic issues, accessibility, intertextuality, and declarative structure (Jiménez et al., 2021).

Scholars propose various models of academic texts, highlighting their diverse structures and functions (Revutska, 2018; Omelchuk, 2021).

The hamburger model provides a structured way to understand a scientific text as a social product. The top of the bun represents the introduction, while the bottom bun signifies the conclusion, highlighting the difference between what a student writes and what should be written. The patty in the middle represents the student's ideas – without them, a scientific text cannot exist. This model emphasizes that the introduction and conclusion firmly hold the core content – the main body of the text – together.

The rhetorical model highlights the integrity of an academic text at the rhetorical level. It considers the complexity of the text, addressing both linguistic and metalinguistic aspects. This model emphasizes proper alignment with the subject matter while engaging the intended audience. The issue under discussion should be presented to capture the reader's interest and ensure that the information is relevant and valuable. Writers should avoid unnecessary or seemingly interesting but irrelevant details. Instead, every fact must be well-reasoned and supported by a structured evidence system. When applying this model, careful attention must be given to mechanics – vocabulary, grammar, and style – as a poorly chosen word can undermine even the most meticulously prepared academic text.

AI can significantly contribute to teaching students to write according to the above patterns of academic text structure and models. However, the content and quality of the texts in this case remain a concern. Semrl et al. (2023) investigated the viability of conversation systems for answering scientific queries and supporting academic writing. The findings indicate that AI conversation systems are a viable approach to aiding the drafting of scientific publications. However, the lack of originality, the penchant for superfluous writing, and the use of complex and imprecise terminology may indicate that a paper was written by AI rather than a human author. The research also highlighted other obstacles, including limited originality, data-bias issues, AI hallucinations (inaccurate or deceptive information provided by the AI), and concerns about openness in the AI's decision-making processes.

According to Fishman (2016), institutional and social variables are increasingly regarded as having a substantial impact on academic integrity. In the Ukrainian context, it should be noted that the war has further aggravated issues of academic integrity related to the use of AI tools. In frontline regions, education takes place online, and offline education often takes place in bomb shelters. The critical security situation does not allow students to devote sufficient time to writing high-quality academic texts based on the analysis of multiple sources. Unstable internet

connections also make it difficult to search for and analyze bibliographic sources. As a result, there is an increased risk that students will turn to the easiest and quickest solutions, using ChatGPT and similar AI platforms to generate academic texts and complete various curricular tasks. In the rear regions, there are also specific problems - mainly related to a decrease in the level of mental well-being of students, namely increased anxiety, emotional burnout and manifestations of depressive states, which negatively affect students' ability to think critically and analytically and also contribute to the popularization of generative AI tools among students. These phenomena not only have a direct adverse effect on the formation of students' attitudes toward academic integrity, but also produce long-term adverse outcomes: graduates will carry the defective attitudes they have developed into their subsequent professional activities. This necessitates developing a comprehensive approach to eliminate the aforementioned negative phenomena and their consequences. Here, research and practices from other countries can serve as benchmarks. In particular, Davis (2023) contends that, in the face of conflicts and crises, academic integrity might be reframed as an academic competence linked to certain beliefs. Academics, university managers, and policymakers may play a critical role in driving change and educating future academics, researchers, administrators, and graduates to lead universities in the future by imparting information about the importance of academic integrity within a university setting. The findings offer several perspectives on academic integrity and emphasize the importance of revising regulations to foster academic integrity as a valued talent. Furthermore, the findings underscore the importance of adopting a developmental strategy that goes beyond simply eliminating wrongdoing and promotes a comprehensive understanding of academic integrity. One should remember that by emphasizing misbehaviour rather than conduct, there is a risk of just "training" students to stay within boundaries without ever educating them about the fundamental reasons for their existence. By adopting just rules and integrity and/or honesty declarations, we restrict the institution's and staff members' ability to properly lead students in building a common understanding of the values that support learning, teaching, and research endeavours.

It is essential to highlight another critical stage in academic writing: checking the originality of a scientific text using anti-plagiarism software. This software compares the submitted document against a vast database of texts to identify any overlapping fragments. This process ensures compliance with academic integrity, which, according to the Law of Ukraine *On Education* (2017, Art. 42), is defined as "a set of ethical principles and rights that participants in the educational process must adhere to during learning, teaching, and research activities." Academic integrity requires proper citation of sources, respect for copyright laws, and the accurate presentation of research findings. Omelchuk (2021) further explores this concept, emphasizing that academic integrity is based on ethical principles and rules, is reflected in both educational and research activities, applies to all participants in the educational process, and ensures trust in the results of educational and research endeavours.

However, research and practical experience at higher education institutions indicate that students are increasingly exposed to new technologies, including artificial intelligence, many of which they may be unfamiliar with. This raises important questions regarding the proper evaluation of AI applications, the need for adequate student training, and the development of effective methodologies for integrating these technologies into academic work. Scholars define AI as an organized set of information technologies that enable the performance of complex tasks by applying scientific research methods and algorithms to process information, whether received or independently created during work. This also encompasses creating and using proprietary knowledge bases, decision-making models, and algorithms to work with information and determine pathways to achieve specific goals. However, it is important to recognize that while AI

technologies are structurally complex, they are accessible and typically function by searching publicly available information in search engine databases. These systems process and provide data to users upon request, often without citing sources, which can result in copyright violations. This poses a challenge for educators, as distinguishing between tasks completed by students and those generated with AI assistance can be difficult. As mentioned above, studies indicate that over-reliance on AI dialogue systems may impair critical cognitive skills, such as critical thinking (Dergaa et al., 2023), decision-making (Duhaylungsod & Chavez, 2023), and analytical thinking (Grassini, 2023).

We fully agree with researchers that the impact of artificial intelligence on academic integrity is significant and can be understood in the following ways:

1. Personalization of learning: AI enables the creation of adaptive learning platforms that cater to each student's individual needs and knowledge levels, allowing for the development of personalized educational pathways that consider students' interests, abilities, and learning pace.
2. Increasing accessibility of education: AI enhances access to education for individuals with disabilities or those facing geographical or social barriers.
3. Improving the quality of education: By vast amounts of data, AI helps to understand student needs better and assess the effectiveness of teaching methods.
4. Supporting teachers, educators, and researchers: AI can reduce the administrative burden on educators, allowing them to focus more on teaching and research.
5. Expanding learning opportunities: AI promotes interactive and immersive learning through technologies such as virtual laboratories and game-based learning methods (Partiko et al., 2024)

We are impressed by the research conducted by Russell et al., who identify key requirements for the use of AI technologies: establishing clear rules for when and how students, teachers, researchers, and other educational stakeholders can use various types of AI tools. These policies and guidelines should be communicated transparently to all involved parties, guiding how to transparently and adequately acknowledge the use of AI tools in academic work, including assignments, dissertations, papers, articles, book chapters, computer programmes, graphs, illustrations, and other types of artifacts.

We agree with Palamar and Naumenko (2024) that artificial intelligence technologies and education are inseparable. While some scholars express concerns and potential threats regarding integrating AI into the educational process, others actively incorporate these technologies into their practices. The primary task of educators is to guide students in using AI for scientific research and for selecting materials for classes. Additionally, organizing and co-organizing activities to raise awareness of academic ethics in higher education institutions is crucial. This includes providing information about academic integrity on the institution's website, involving students in developing and implementing academic integrity policies and rules, and discussing the state of academic ethics across various levels (from academic groups and departments to academic councils and administration). Other strategies could involve using motivational quotes from the code of ethics, organizing "academic integrity weeks," introducing training courses (credits) in educational programs for participants at all educational levels, offering in-service training programs for teachers, and creating individual contracts with all participants in the educational process to define ethical obligations and outline responsibility for failing to meet academic integrity requirements (Ruskulis, 2022).

Despite AI's advantages, we must also highlight certain disadvantages. AI use introduces challenges in detecting violations of academic integrity, such as plagiarism, making the process

more complex. Moreover, AI tools capable of generating high-quality academic work may compromise academic honesty and disrupt the logical progression of the educational process. The evolution of the educational and scientific landscape brings new challenges, including plagiarism in research papers and dishonest assessments.

These challenges highlight the urgent need to establish effective ethics committees within educational institutions.

Conclusion

The research suggests that the balance between maintaining academic integrity and enforcing it among students, educators, and researchers when using AI tools remains insufficiently clarified. AI technologies have a legitimate place in education and are designed to enhance both the educational process and students' research activities. Interest in using AI in education and academia is growing, raising specific challenges and threats to academic integrity.

It is essential to focus on developing information literacy in the context of modern technologies while understanding AI's purpose and potential applications. A crucial role in this process is fostering an academic culture among students through activities that implement academic integrity policies, raise awareness of the importance of adhering to these principles, identify common forms of academic dishonesty, and explore ways to prevent them.

Ultimately, the data show that AI provides considerable benefits, such as tailored learning, higher academic outcomes, and increased student engagement. However, issues such as over-reliance on AI, poor critical thinking, data privacy risks, and academic dishonesty were identified. The study emphasizes the importance of a systematic framework for AI integration, grounded in ethical principles, to maximize benefits while minimizing risks. While AI has enormous potential to improve learning efficiency and academic achievement, its successful deployment must address accuracy, cognitive disengagement, and ethical consequences. A balanced approach is required to promote equitable, effective, and responsible learning experiences in AI-enabled educational environments.

Bios

Liliia Ruskulis is a doctor of pedagogical sciences and a professor at the Department of the Ukrainian Language, Literature and Teaching Methodology at Admiral Makarov National University of Shipbuilding in Mykolaiv, Ukraine. With extensive teaching and research experience, she focuses on language didactics, teaching methods for the Ukrainian language, and modern educational technologies. Prof. Ruskulis is actively engaged in scientific research and has published numerous papers in pedagogy and philology.

Rymma Maiboroda is a senior lecturer at the Department of Special Language Training at the Military Institute of Taras Shevchenko National University of Kyiv in Ukraine. Her teaching and research activities focus on military-specific language instruction, applied linguistics, and methods of foreign-language instruction in military education. She has contributed to various scientific projects and publications on professional language competence.

Olena Popova holds a PhD in pedagogy and serves as an associate professor at the Department of Ukrainian Philology at Kyiv National Linguistic University in Ukraine. Her academic interests lie in philological education, Ukrainian linguistics, and the integration of innovative methods in

language teaching. Dr. Popova is the author of multiple scholarly articles and takes part in interdisciplinary research initiatives.

Inna Rodionova is a candidate of philological sciences and an associate professor at the Department of the Ukrainian Language, Literature and Teaching Methodology at Admiral Makarov National University of Shipbuilding in Mykolaiv, Ukraine. Her research interests include modern Ukrainian language, linguodidactics, and textual analysis. She has participated in developing educational materials and actively contributes to philological research.

Olesia Olecsuk is a candidate of philological sciences and an associate professor at the Department of the Ukrainian Language, Literature and Teaching Methodology at Admiral Makarov National University of Shipbuilding in Ukraine. Her work encompasses Ukrainian linguistics, methodology of teaching language and literature, and cognitive approaches to text interpretation. She is involved in academic projects and has authored numerous educational resources.

Nataliia Ababilova is a candidate of pedagogical sciences and an associate professor at the Department of English Philology and Translation at Petro Mohyla Black Sea National University in Mykolaiv, Ukraine. Her teaching focuses on English philology and translation studies, while her research covers pedagogical technologies in foreign language instruction. Dr. Ababilova regularly publishes in peer-reviewed journals and engages in international academic cooperation.

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