Kornieva, Z., Baklazhenko, Y., & Lukianenko, V. (2025). AI & AIED: Ensuring academic integrity in AI-driven education. *Advanced Education*,27,4-11. DOI: 10.20535/2410-8286.349020

# AI & AIED: ENSURING ACADEMIC INTEGRITY IN AI-DRIVEN EDUCATION

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***Abstract.*** *The paper investigates the normative aspect of AIED (Artificial Intelligence in Education) integration within Ukraine's system of higher education. While AI offers significant opportunities for enhancing teaching, learning, and academic support, its implementation also raises essential ethical and integrity-related concerns. The growing accessibility and sophistication of AI tools make them a game-changer in education, and necessitate their clear regulation at national and institutional levels. At the national level, Ukraine has introduced several key policy documents relevant to AI use in education. The authors provide an overview of these normative frameworks and outline key principles for the ethical use of AI in higher education. The study highlights the urgent need for coherent policies to ensure that AIED is used fairly.*

***Keywords:*** *Artificial Intelligence in Education (AIED); academic integrity; higher education; policy frameworks; institutional regulation; assessment practices.*

[1] Writing–review and editing
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## 1. INTRODUCTION

Over recent decades, the world has witnessed rapid development in information technologies, which marked a new stage in global advancement. Education, like many other social domains, has undergone substantial transformation through the integration of digital tools. The widespread use of the Internet, digital libraries, and multimedia resources has significantly expanded access to knowledge, while immersive technologies have augmented the ways in which learning occurs.

The most recent and widely debated development in education is the emergence of generative artificial intelligence (GenAI) - user-friendly, multifunctional technology capable of executing complex tasks formulated in natural language. The impact of GenAI tools has been so profound that, within a very short timeframe, the term AIED (Artificial Intelligence in Education) gained widespread popularity. While the field itself has existed for decades, it has now acquired higher prominence, encompassing all aspects of AI integration, pedagogical transformation, and the evolving standards of academic integrity.

AIED can offer many opportunities for all participants in the educational process. When used appropriately, AI tools may support and enhance learning; however, misuse may undermine the very process of learning. This ambiguity in AI applications has intensified debates within academic communities, where ethical standards and academic integrity constitute foundational principles of scholarly practice. Some educators respond to perceived unethical student use of AI by attempting to prohibit such tools altogether, including reverting to traditional, non-digital forms of assessment. Conversely, students are increasingly raising concerns about the use of AI tools by educators in the development of teaching and assessment materials.

The need for a clearly articulated set of rules defining acceptable forms of AI use for all participants in the educational process is evident. Therefore, the aim of this paper is to outline the existing normative frameworks for academic integrity and the use of AI in education in both international and Ukrainian contexts.

## 2. ACADEMIC INTEGRITY IN EDUCATION: INTERNATIONAL AND UKRAINIAN CONTEXT

In order to determine the place of AI tool usage within the paradigm of academic integrity, it is necessary to begin with a clarification of the concept of academic integrity itself. **Academic integrity** is defined in the Glossary for Academic Integrity as “compliance with ethical and professional principles, standards, practices and consistent system of values that serves as guidance for making decisions and taking actions in education, research and scholarship” (ENAI, 2008). As can be seen from the definition, it presents a refined structure of broader concepts (values and practices) that narrow down to standards and principles applicable to a specific sphere or institution.

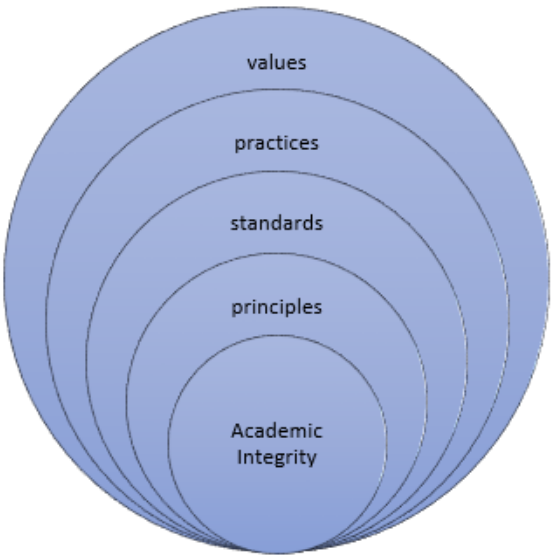


**Figure 1**. Refined structure of the academic integrity concept

European policy documents present several interpretations of the core values constituting the academic ethos. According to The Bucharest Declaration concerning Ethical Values and Principles for Higher Education in the European Region, the key values of academic integrity are honesty, trust, fairness, respect, responsibility, and accountability (Bucharest Declaration, 2006). The International Center for Academic Integrity (ICAI) stipulates that ethos *values* include honesty, trust, fairness, respect, responsibility, and courage (ICAI, 2021). The latter value, addressing rather the quality of character of academic community members, means "the willingness to hold themselves… accountable for maintaining a culture of integrity as defined by the five additional values", which, in general, is in line with the value of accountability in the Bucharest Declaration.

As for the Ukrainian framework of AI regulation, a newly issued Law of Ukraine on Academic Integrity (2025) provides for such a list of ethical values: "**honesty** of participants in the educational process as well as scientists in their own and other people's eyes, honesty of educational and scientific institutions before students, employees and partners; **trust** in the results of academic activity of others, in particular, in the fact that the abovementioned results were obtained honestly and in compliance with the relevant rules and standards; **respect** for the honour and dignity of each and every member of the academic community, in particular, solving problems without compromising one's own values, valuing the diversity of opinions, respect for the intellectual property rights of others; **fairness** in the attitude of participants of academic activity to each other, in particular, the creation of fair policies of educational institutions, scientific institutions, consistent and impartial response to violations of academic integrity, honest evaluation of the results of academic activity; **responsibility** of academic activity subjects for the results of their academic activity to themselves, to each other and to society; **persistence** in the honest conduct of one's academic activities regardless of external and internal incentives to violate them and regardless of the presence or absence of external control; **determination** in fostering the academic integrity culture, courage to defend academic integrity in educational and scientific activities". These values

are intended to guide scholars, educators, learners, and other participants in the educational process in their academic and professional activities. As we can see from Comparative Table 1, Ukrainian law expands the list of academic integrity values by introducing determination and persistence, which identify the direction of transformational processes in education towards common European values.

**Table 1.** Comparative table of ethos values in Bucharest Declaration, ICAI "The Fundamental Values of Academic Integrity' and Draft Law of Ukraine on Academic Integrity

| Bucharest Declaration concerning Ethical Values and Principles for Higher Education (2004) | ICAI (2021) | The Law of Ukraine on Academic Integrity (2025) |
|---|---|---|
| Honesty | Honesty | Honesty |
| Trust | Trust | Trust |
| Fairness | Fairness | Respect |
| Respect | Respect | Fairness |
| Responsibility | Responsibility | Responsibility |
| Accountability | Courage | Persistence |
| | | Determination |
| | | Courage |

Ethical and professional principles, standards, practices, and rules of conduct are typically further elaborated in institutional codes of ethics or codes of academic integrity. As a rule, codes of ethics for universities and tertiary institutions aim to establish rules of conduct that ensure ethical academic research, teaching, learning, and interaction within the institution's community. Codes of academic integrity aim at establishing rules of honest and ethical conduct in matters related to scholarly work.

Traditionally, institutional codes explicitly regulate a wide range of academic practices, including data handling, authorship attribution, assessment conduct, and the prevention of academic misconduct.

While theoretical aspects of academic integrity are regulated at multiple levels, the use of AI tools within the academic context remains insufficiently articulated and systematized and is still in the process of conceptual and practical consolidation. Consequently, there is a growing need to establish explicit rules of conduct governing AIED.

## 3. INTERNATIONAL POLICY FRAMEWORKS FOR ACADEMIC INTEGRITY IN AIED

The earliest attempts to assess the impact of AI on education and academic integrity were notably cautious. The central issue that emerged concerned the authorship of AI-generated text. As noted by Benito (2023) with regard to AI-generated output, "applying the value of honesty, key to academic integrity according to the International Center for Academic Integrity, we are not being honest if we attribute its authorship".

More specific guidelines on the use of AI were provided in the ENAI Recommendations on the Ethical Use of Artificial Intelligence in Education (Foltynek et al., 2023). These recommendations introduced the umbrella term *unauthorised content generation* to describe unethical use of AI tools, defined as "the production of academic work, in whole or part, for

academic credit, progression or award, whether or not a payment or other favour is involved, using unapproved or undeclared human or technological assistance".

The ENAI recommendations distinguish between the use of AI for generating content or ideas and its use for editing content produced by a human author. In the former case, AI tools should be appropriately acknowledged (see McAdoo, Denneny, & Lee, 2025) and the author shall bear full responsibility for the content of the work (including AI-generated one). In the latter case, the use of AI tools is generally considered acceptable.

In this context, AI tools may be employed in two fundamentally different ways: as assistants in the learning process or as generators of academic content.

In the first case, students can use AI tools for practicing and learning. In this way, they can improve their conversational skills, ask AI to explain subject topics, receive feedback on their mistakes, and enhance the quality of their work. The primary ethical concerns in this case relate to the features of the system – potential for errors, generating false data, providing biased opinions, and misleading to false or biased interpretations of information.

In the second case, AI generates content that is submitted for academic credit or evaluated as part of a student's academic performance. In this context, unethical use may range from deception (claiming that the work was produced independently by the student) to plagiarism, which involves the use of generated content without proper attribution. However, when used appropriately and in accordance with clearly articulated procedures, this mode of AI use may contribute to the development of new learning strategies.

In its Statement on Academic Integrity and Artificial Intelligence (2023), the International Center for Academic Integrity (ICAI) emphasised the importance of maintaining scholarly scepticism toward the use of AI tools. The statement outlines several reasons for such scepticism, including concerns related to privacy and confidentiality of personal data, potential bias in generated output, and the risk of misinformation, disinformation, and fabricated references (commonly referred to as hallucinations or phantom data).

Additional concerns include copyright and plagiarism risks, reduced diversity of voices in generated content, unequal access due to paywalled tools, environmental costs associated with energy consumption, and the ethical implications of AI development within a largely unregulated industry.

Recently, some practical recommendations have been proposed for aligning AI with ICAI's Fundamental Values (2025). C. Roberts reinterprets six academic integrity values through the lens of AI usage in the classroom, emphasizing the transparency of its use and advocating for a review of institutional policies.

Over time, discussions of AI in AIED have evolved from conceptual concerns to the formulation of practical recommendations. Significant progress has been made, including the development of definitions of unethical AI use, the identification of associated risks, and the articulation of conditions under which AI integration may be considered pedagogically valuable.

## 4. NATIONAL POLICY OF UKRAINE ON ACADEMIC INTEGRITY FOR AIED

In Ukraine, the general attitude toward the implementation of AI in different spheres is positive. The first document regulating AIED at the national level was General Recommendations for the Use of AI in Secondary Schools, issued in 2024.

The latest national framework for AI regulation in HEIs of Ukraine includes the Recommendations for the Responsible Implementation and Use of Artificial Intelligence Technologies in Higher Education Institutions (2025), issued by the Ministry of Digital Transformation and the Ministry of Education of Ukraine. The document outlines the dual role of artificial intelligence in higher education, emphasising both the risks it poses to academic integrity and its substantial pedagogical potential. AI may facilitate academic misconduct when its outputs are used for unauthorised collaboration, examination cheating, or answer generation; in such cases, responsibility for the violation rests with the user.

The Recommendations distinguish between two categories of AI-related violations:

1) AI-generated breaches, including plagiarism, data falsification and fabrication of data, and non-compliance with Creative Commons licences;

2) user-driven misconduct, such as cheating, collusion, deception, and other forms of unauthorised cooperation facilitated by AI.

These categories are consistent with those described in the previous sections. In the Recommendations, the importance of understanding each type of integrity breach is emphasised, and the ways in which such violations may occur are explained, which is particularly relevant at the early stages of AI integration.

Moreover, to minimise these risks, the Recommendations propose a set of preventive measures for both teachers and students.

For teachers, the recommendations include maintaining transparent communication and an explicit position on AI use rather than imposing strict prohibitions; clearly defining permitted AI functions for each assignment; requiring mandatory attribution of AI involvement, including its role and scope; regularly updating assessment tasks; and complementing written assignments with oral components or alternative assessment formats (such as projects or assignments based on primary or personal data) to verify students' understanding and critical thinking.

For students, the guidelines focus primarily on attribution and transparency. Learners are required to follow the instructor's rules regarding AI use and provide full disclosure of such use, specifying the exact prompts applied, the segments generated by AI, and whether the outputs were used verbatim or after modification (Ministry of Digital Transformation of Ukraine, 2025 & Ministry of Education and Science of Ukraine, 2024).

Given the availability of national guidance on AI integration in educational contexts, the next stage is the development of institution-level policies and transparent syllabus-level guidelines tailored to the specific requirements of each discipline.

## 6. CONCLUSIONS

Artificial intelligence tools are increasingly transforming educational practices, creating new opportunities for learning while simultaneously posing challenges to academic integrity. In Ukraine, national and institutional policies are gradually responding to these developments; however, comprehensive regulatory frameworks at the institutional and course levels have yet to be fully established. This gap is particularly significant given that disciplinary differences in methodology and assessment practices require specific approaches to AI use.

To ensure the ethical and integrity-oriented use of AI in education, the next step should include aligning institutional policies on AI use with academic integrity principles, i**ntegrating AI literacy and ethics** into teacher training and student orientation programmes, and including **course-level regulations** (in syllabi), clarifying acceptable AI assistance in specific disciplines.

Establishing a transparent hierarchy of ethical standards across national, institutional, and course levels can help ensure that artificial intelligence functions as a supportive tool for learning and academic development rather than a threat to academic integrity.

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## AI & AIED: ЗАБЕЗПЕЧЕННЯ АКАДЕМІЧНОЇ ДОБРОЧЕСНОСТІ В ОСВІТІ В КОНТЕКСТІ ВИКОРИСТАННЯ ІНСТРУМЕНТІВ ШІ

У статті досліджуються нормативні аспекти використання інструментів штучного інтелекту в освіті (AIED) України. Хоча штучний інтелект відкриває значні можливості для вдосконалення навчання, викладання та управління освітнім процесом, його впровадження також супроводжується складними етичними викликами та ризиками для академічної доброчесності. Доступність та функціональність інструментів ШІ робить їх чинником змін в освіті, і водночас потребує чітких нормативних рішень на національному та інституційному рівнях. На загальнодержавному рівні в Україні ухвалено низку політик, що регламентують використання ШІ в освіті. Автори подають огляд цих нормативних документів і окреслюють ключові принципи етичного застосування ШІ у вищій освіті. Дослідження підкреслює нагальну потребу в узгоджених і прозорих політиках, які гарантуватимуть, що AIED сприятиме академічній доброчесності та відповідальній освітній практиці.

**Ключові слова**: Штучний інтелект в освіті (AIED); академічна доброчесність; етика ШІ; вища освіта; нормативно-політичні рамки; генеративний ШІ; інституційне регулювання; оцінювальні практики.