



THE GROWTH OF ARTIFICIAL INTELLIGENCE USE WITHIN THE EDUCATIONAL PROCESS OF UNIVERSITIES

UDC 378:004.8

Dubtsova O.

Ph.D. in Philology, Associate Professor
of the Department of Pedagogy, Foreign Philology and Translation
of Simon Kuznets Kharkiv National University of Economics

Makhatilov A.

Postgraduate (third) educational and scientific level 1st year student
of the Department of Pedagogy, Foreign Philology and Translation
of Simon Kuznets Kharkiv National University of Economics

Annotation. Artificial intelligence is transforming higher education by enabling personalized learning, improving institutional efficiency and supporting predictive analytics. However, generative AI raises concerns about academic integrity, bias, and data privacy, requiring redesigned curricula, innovative assessment methods, and strengthened AI literacy across institutions.

Keywords: assessment, artificial intelligence, generative AI, higher education, personalized learning.



Анотація. Штучний інтелект трансформує вищу освіту, забезпечуючи персоналізоване навчання, підвищуючи ефективність університетів та підтримуючи прогностичну аналітику. Однак генеративний ШІ викликає занепокоєння щодо академічної доброчесності, упередженості та конфіденційності даних, вимагаючи переосмислення навчальних програм, інноваційних методів оцінювання та підвищення рівня грамотності у сфері ШІ в закладах вищої освіти.

Ключові слова: вища освіта, генеративний ШІ, персоналізоване навчання, оцінювання, штучний інтелект.



Artificial intelligence (AI) has been fundamentally changing higher education by introducing a new range of tools and transforming the way teaching and learning take place.

While the technology promises significant gains and the potential for personalized learning, it also introduces ethical and educational challenges.

The analysis of the current level of AI adoption provides for evaluating its projected benefits and risks it presents, including the following:

1. Efficiency of the personalized learning environment. AI integration brings strong benefits to higher education by enhancing personalized student learning plans and optimizing overall university operations, particularly in the following ways:

- adaptive learning systems shift education away from a generic lecture model toward a personalized learning experience. By analyzing data on student performance, AI tools dynamically adjust the curriculum, learning pace and the provided feedback. This individualized approach supports student success and development by effectively addressing the diverse needs of today's learners [7];

- operational efficiency: AI tools make everyday routine tasks more automated, such as making assessments more objective and using chatbots to provide quick answers to specific queries. This efficiency measure is essentially freeing up valuable faculty time for research, curriculum development, and high-quality, person-centered interactions with students [6];

- predictive analytics: universities are now using AI for predictive analytics to monitor engagement data and identify students at risk of underperforming or dropping out. These insights enable timely interventions that can significantly enhance student retention and overall academic productivity.



2. Ethical challenges related to artificial intelligence and academic integrity are becoming increasingly important, as generative artificial intelligence (GenAI) grows more widespread, including models like ChatGPT and posing a genuine threat to traditional and typical assessment methods and core academic values, in particular:

- behavior that becomes academically incorrect: GenAI allows higher education students to produce complex written assignments with minimal effort, leading to a crisis of academic transparency and the destruction of authentic assessment. Institutions must address these challenges by developing appropriate assessment strategies and continuously monitoring the effectiveness of the implemented solutions [4];
- bias and fairness: as AI relies on data that is already in place, it often reflects gender, racial or political biases. Thus, using this data risks reinforcing social inequalities and leading to biased outcomes for certain groups of students [8];
- data privacy: AI systems require large volumes of sensitive data, which raises serious concerns about privacy breaches and the potential loss of learner autonomy as individuals become overly reliant on automated decision-making for creating content or learning materials [2].

Integrating artificial intelligence necessitates significant changes to the core functions of higher education – teaching, learning and assessment – particularly in the following areas:

- shifting the focus of learning: education must recognize that routine tasks no longer need traditional assessment, as AI can easily handle them. Instead, evaluations should emphasize creative reasoning, complex real-world problem-solving, innovation and the ability to tackle intricate practical situations [5];
- the teacher becomes a mentor: it is becoming increasingly important for the teacher not just to provide information, but to transform it, not just deliver content, but to be a mentor and guide in more complex processes. Empirical learning and the cultivation of human skills, such as empathy, critical discussion and subtle understanding are gaining greater importance as AI cannot replicate them [1].
- innovation in assessment: teachers should adopt modern assessment methods, such as oral exams and real-time evaluations of critical thinking, which will make such assessment resistant to the use of GenAI [3].

Artificial intelligence has evolved beyond being merely a tool for work or study; it represents a transformative force capable of reshaping higher education. While AI promises a high level of personalization and high levels of efficiency, educational institutions must actively address and mitigate the risks related to academic integrity, bias, and data privacy.

It is crucial to understand that the future of higher education relies on a shared commitment to AI literacy and a willingness to redesign curricula and assessment methods to emphasize uniquely human skills in an increasingly automated world.

References: 1. Crain C., Ewing A., Billy I., Anush H. The advantages and disadvantages of AI in higher education. *The Business and Management Review*. 2024. Vol. 15. No. 3. P. 168–178. 2. García-López I. M., Trujillo-Liñán L. Ethical and regulatory challenges of Generative AI in education: a systematic review. *Frontiers in Education*. 2025. Vol. 10. P. 1–13. 3. Liang J., Stephens J. M., Brown G. T. L. A systematic review of the early impact of artificial intelligence on higher education curriculum, instruction, and assessment. *Frontiers in Education*. 2025. Vol. 10. P. 1–19. 4. Williams R. T. The ethical implications of using generative chatbots in higher education. *Frontiers in Education*. 2023. Vol. 8. P. 1–6. 5. Holmes W., Tuomi I. State of the art and practice in AI in education. *European Journal of Education*. 2022. Vol. 57. No.4. P. 542–570. 6. Klimova B., Pikhart M. Exploring the effects of artificial intelligence on student and academic well-being in higher education: a mini-review. *Frontiers in Psychology*. 2025. Vol. 16. P. 1–7. 7. Zawacki-Richter O., Marín V. I., Bond M., Gouverneur F. Systematic review of research on artificial intelligence applications in higher education: Where are the educators? *International Journal of Educational Technology in Higher Education*. 2019. Vol.16. P. 1–27. 8. Eacersall, D. et al. Navigating ethical challenges in generative AI-enhanced research: the ETHICAL framework for responsible generative AI use. *Journal of Applied Learning & Teaching*. 2025. Vol. 8. No. 2. P. 102–115.

Стаття надійшла до редакції 04.12.2025 р.

