

Також проаналізувавши літературу по питанням навчання усного мовлення на іноземній мові з'ясували, що найважливішими етапами при навчанні говорінню є реплікування, оволодіння певними діалогічними єдностями і оволодіння мікро діалогом. При навчанні діалогічному мовленню рекомендовано використовувати шлях від засвоєння спочатку елементів діалогу (реплік, діалогічні єдності) до самостійної побудови діалогу. Для навчання діалогічному мовленню слід використовувати наступні вправи:

- вправи для навчання реплікування;
- вправи на засвоєння і вживання діалогічних єдностей;
- вправи на об'єднання засвоєнних діалогічних єдностей та на створення мікродіалогів.

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## ІНТЕГРАЦІЯ ШТУЧНОГО ІНТЕЛЕКТУ У ВИЩУ ОСВІТУ ЯК ЧИННИК МОДЕРНІЗАЦІЇ ОСВІТНЬОГО СЕРЕДОВИЩА

У статті розглянуто проблему інтеграції штучного інтелекту у систему вищої освіти як одного з ключових чинників модернізації сучасного освітнього середовища. Актуальність дослідження зумовлена стрімким розвитком цифрових технологій, трансформацією соціально-економічних процесів та зростанням вимог до якості підготовки фахівців у цифрову епоху.

Проблема дослідження полягає у відсутності цілісного науково обґрунтованого підходу до інтеграції штучного інтелекту у вищу освіту, який би поєднував технологічні можливості інтелектуальних систем із педагогічними, етичними та соціальними засадами функціонування університету. Особливої уваги потребують питання персоналізації навчання, автоматизованого

оцінювання, аналітики освітніх даних, трансформації професійної ролі викладача, забезпечення академічної доброчесності, захисту персональних даних і запобігання алгоритмічній упередженості.

Метою статті є теоретичне обґрунтування концептуальних засад інтеграції штучного інтелекту у систему вищої освіти та визначення його впливу на трансформацію освітнього середовища, педагогічної діяльності й управлінських процесів університету. Для досягнення поставленої мети здійснено аналіз сучасних тенденцій цифрової трансформації освіти, визначено основні напрями використання інтелектуальних систем у навчальній і науковій діяльності, охарактеризовано зміни у професійній ролі викладача, а також виявлено педагогічні, соціальні, економічні та етичні виклики впровадження штучного інтелекту.

Узагальнені результати дослідження свідчать, що інтеграція штучного інтелекту відкриває широкі можливості для підвищення якості освіти через формування індивідуалізованих освітніх траєкторій, розвиток дослідницького навчання, удосконалення систем моніторингу успішності та оптимізацію управлінських процесів. Водночас ефективність впровадження інтелектуальних технологій залежить від наявності стратегічної інституційної політики, міждисциплінарного підходу, належної нормативно-правової бази та розвитку цифрових компетентностей усіх учасників освітнього процесу. Обґрунтовано необхідність формування культури відповідального використання штучного інтелекту в академічному середовищі та збереження балансу між технологічною інноваційністю й гуманістичними цінностями освіти. Зроблено висновок, що за умов системного й науково обґрунтованого підходу штучний інтелект може стати стратегічним чинником модернізації вищої освіти та підготовки конкурентоспроможних фахівців нового покоління.

**Key words:** штучний інтелект, вища освіта, цифрова трансформація, персоналізоване навчання, академічна доброчесність, цифрові компетентності; дослідницьке навчання.

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## THE INTEGRATION OF ARTIFICIAL INTELLIGENCE INTO HIGHER EDUCATION AS A FACTOR IN THE MODERNISATION OF THE EDUCATIONAL ENVIRONMENT

*This article examines the integration of artificial intelligence into higher education as a key factor in modernising the contemporary educational environment. This research is relevant due to the rapid development of digital technologies, the transformation of socio-economic processes, and the growing demand for high-quality specialist training in the digital age.*

*The research problem lies in the absence of a comprehensive, scientifically grounded approach to integrating artificial intelligence into higher education that combines the technological capabilities of intelligent systems with the pedagogical, ethical and social foundations of university operations. Particular attention should be paid to personalised learning, automated assessment, educational data analytics, the changing role of lecturers, academic integrity, personal data protection, and the prevention of algorithmic bias.*

*This article aims to provide a theoretical justification for integrating artificial intelligence into the higher education system and to determine its impact on the transformation of the educational environment, teaching practice, and university management processes. To achieve this aim, we have analysed current trends in the digital transformation of education, identified the main areas of application of intelligent systems in teaching and research, characterised changes in the professional role of lecturers, and highlighted the pedagogical, social, economic, and ethical challenges of introducing artificial intelligence.*

*The overall findings of the study indicate that integrating artificial intelligence could significantly improve the quality of education by creating personalised learning pathways, developing inquiry-based learning, refining performance-monitoring systems, and optimising management processes. At the same time, the effectiveness of implementing intelligent technologies depends on the existence of strategic institutional policies, an interdisciplinary approach, an appropriate regulatory framework, and the development of digital competencies among all participants in the educational process. The importance of fostering a culture of responsible AI use in the academic environment and maintaining a balance between technological innovation and the humanistic values of education is substantiated. It is concluded that, if a systematic, scientifically grounded approach is adopted, AI can be a key factor in modernising higher education and training a new generation of competitive specialists.*

**Key words:** artificial intelligence, higher education, digital transformation, personalised learning, academic integrity, digital skills, inquiry-based learning.

**Formulation and justification of the relevance of the issue.** The rapid development of digital technologies and the increasing use of artificial intelligence are driving profound changes in socio-economic processes, with direct impacts on the higher education system. Universities must modernise their educational environments, curricula and management mechanisms to align with the demands of the digital economy and knowledge-based society.

At the same time, the introduction of artificial intelligence technologies in higher education is a contentious issue. On the one hand, intelligent systems open up opportunities for personalised learning, auto-

mated assessment, educational data analytics and improved management efficiency. On the other hand, their use also raises a variety of pedagogical, ethical, legal and social challenges concerning the protection of personal data, academic integrity, algorithmic bias, and the changing role of lecturers.

The problem lies in the absence of a comprehensive, scientifically grounded approach to integrating artificial intelligence into higher education, one that combines technological capabilities with pedagogical principles and the humanistic values of the university tradition. The insufficient development of the methodological foundations for implementing intelligent systems, as well as

mechanisms for assessing their effectiveness, necessitates a comprehensive study of this issue.

**An analysis of recent research and publications.**

The issue of integrating artificial intelligence (AI) into higher education is being actively explored by domestic and international researchers in the context of society's digital transformation. Academic works examine topics such as personalised learning, adaptive educational systems, automated assessment, educational data analytics and generative models for creating educational content.

Another area of research focuses on the transformation of teaching practice in the context of digitalisation. Researchers emphasise the shift in the teacher's role from transmitter of knowledge to facilitator of the learning process, mentor, and organiser of an interactive educational environment. Considerable attention is given to developing students' digital and algorithmic literacy, critical thinking skills, and ability to use intelligent systems responsibly.

Meanwhile, the ethical and legal aspects of using artificial intelligence in education are a key topic of discussion in contemporary academic literature. Particular focus is given to issues relating to academic integrity, data protection, algorithmic transparency, and the prevention of discriminatory practices. Researchers emphasise the need for an interdisciplinary approach to integrating intelligent technologies, taking into account pedagogical, economic, social and legal factors [7,12,14].

Despite a significant body of literature on the topic, the introduction of artificial intelligence into higher education remains a matter of debate and requires further theoretical consideration. There is a lack of development in issues related to the creation of a comprehensive institutional strategy for the digital transformation of universities, methods for evaluating the effectiveness of intelligent systems, and ensuring a balance between technological innovation and the humanistic principles of education.

Thus, the existing research provides a basis for further comprehensive analysis of the role of artificial intelligence in higher education, but requires systematisation and conceptual synthesis.

**Aim of the article (research objectives).** This study aims to provide a theoretical justification for integrating artificial intelligence into the higher education system and to determine its impact on the transformation of the educational environment, teaching practice, and university management processes.

To achieve this, the following tasks have been set:

1. Analyse current trends in the digital transformation of higher education.
2. Identify the main areas of application for artificial intelligence technologies in educational and research processes.
3. Describe the transformation of the professional role of the lecturer in the context of digitalisation.
4. Identify the pedagogical, social, economic, and ethical challenges of implementing intelligent systems.
5. Justify the need for a strategic policy to integrate artificial intelligence into higher education institutions.
6. Outline promising areas for further research in this field.

The research drew on academic works by Ukrainian and international scholars that focused on the challenges of digital transformation and the implementation of artificial intelligence technologies in higher education. A variety of general scientific and theoretical methods were

employed in the study. Analysis and synthesis were used to generalise contemporary scientific approaches to implementing artificial intelligence in higher education, while comparative analysis allowed various models of digital transformation in educational systems to be compared. A systematic approach was taken to consider the university as a holistic digital ecosystem. Synthesising and interpreting scientific sources contributed to formulating the study's conceptual framework, while using the prognostic method helped outline prospects for developing intelligent technologies in higher education.

**Presentation of the main research findings.** The digital transformation of modern society requires us to reconsider the role of innovative technologies across key areas of human activity, particularly in higher education. In this context, interdisciplinary research analysing the social, economic, ethical and legal aspects of implementing artificial intelligence technologies is particularly relevant. Identifying potential opportunities and risks, and defining the limits of AI's application, are prerequisites for its effective integration into teaching and educational institution management.

Over the past few decades, the higher education system has undergone constant transformation, driven by its integration into the global educational landscape, improvements in the quality of educational services, and the need to adapt to socio-economic changes. The introduction of information and communication technologies, e-learning resources, and digital platforms has contributed to the formation of a new educational paradigm based on openness, mobility, and personalisation. The essence of the digital transformation of education lies in creating individualised learning pathways using digital technologies, particularly artificial intelligence, virtual reality, big data, and educational institutions' advanced digital infrastructure [6].

As a distinct branch of computer science, artificial intelligence is characterised by its ability to analyse large datasets, identify patterns and predict processes. This makes it a vital tool for modernising the education system. In higher education, its use facilitates the automation of routine tasks, the optimisation of administrative processes, and the enhancement of teaching efficiency. At the same time, researchers emphasise that artificial intelligence is not a competitor to teaching staff, but rather a supportive tool that can expand the scope of pedagogical activities and improve the quality of education. The impact of artificial intelligence on education manifests itself in two interrelated areas. Firstly, the increasing use of digital technologies in the economy is creating new demands for employees' skills, requiring the modernisation of educational content. Secondly, artificial intelligence algorithms can directly improve the educational process by providing personalised learning, automating assessment of results, monitoring academic performance, and analysing educational data. This approach allows for the creation of individual educational pathways tailored to students' abilities and the demands of the labour market.

Contemporary academic literature explores a wide range of applications for generative artificial intelligence systems in education. These systems can be used during the course planning stage to generate ideas, structure content, and create teaching materials. Generative models can produce lecture notes, test questions, and educational case studies tailored to students' levels of preparation, and can also provide immediate feedback. While such tools

can enhance teachers' effectiveness and foster an innovative educational environment, they require pedagogical expertise and quality control of the results [1].

The use of artificial intelligence for personalised learning is particularly important. Adaptive systems can select learning content according to a student's level of knowledge, analyse their progress, and suggest additional tasks. Automated assessment systems ensure the objectivity of knowledge assessment, while chatbots can act as personal tutors, explaining complex topics and supporting students throughout the learning process. Other promising developments include proctoring systems, smart campuses and digital platforms for managing the educational process.

At the same time, the introduction of artificial intelligence raises a number of ethical and social challenges. These include protecting personal data, ensuring academic integrity, preventing discriminatory algorithms and fostering critical thinking among students. Researchers emphasise that artificial intelligence technologies must be implemented in close collaboration with lecturers, teaching staff, and educational administrators [12]. A technocratic approach that disregards pedagogical needs may render innovations ineffective.

More broadly, the development of the digital ecosystem is changing the very logic of the educational process. Higher education institutions must not only impart knowledge but also foster creative thinking, research activity, and effective interaction with intelligent systems. The concept of inquiry-based learning, which combines theoretical knowledge with practical research, can be effectively complemented by artificial intelligence tools that facilitate personalisation and expand students' research opportunities.

Integrating artificial intelligence into the higher education system creates new opportunities to improve teaching quality, optimise educational process management and produce competitive professionals [15]. However, the effectiveness of such an implementation depends on taking a comprehensive approach that considers pedagogical, economic, social and ethical factors. Rather than being viewed as a replacement for teachers, artificial intelligence should be seen as a support tool that contributes to the development of the educational environment, enhances its adaptability and ensures a harmonious combination of technological innovations with the humanistic values of education.

Further research in this field should focus on assessing the economic efficiency of AI implementation, developing pedagogically sound methodologies for its use, and studying its impact on students' professional development. Only through a systematic, scientifically grounded approach can AI become a key factor in the development of modern higher education.

Further research into integrating artificial intelligence into higher education requires an in-depth analysis of the methodological basis for incorporating digital technologies into teaching practice. An important area is the development of conceptual models of interaction between lecturers, students and intelligent systems, which will enable the formation of new educational paradigms focused on collaboration between humans and technology. In this context, artificial intelligence can be viewed as part of a wider digital university ecosystem comprising learning resources, analytical platforms, educational management systems, and communication tools.

One of the key trends is the growing importance of educational data analytics [2]. Artificial intelligence systems can conduct in-depth analyses of learning outcomes, student behaviour patterns and the effectiveness of teaching methods and resource provision. This opens up opportunities to predict academic success, identify students at risk of dropping out, and provide targeted support. However, such systems require clearly defined regulatory mechanisms to protect personal data and ensure algorithmic transparency.

Another important issue is the transformation of the teacher's professional role. In the context of the active implementation of smart technologies, the teacher is increasingly acting not only as a source of knowledge, but also as a mentor, a facilitator of research activities and an organiser of the learning environment. Automation frees them from routine administrative tasks, allowing them to focus on developing students' critical thinking, creativity and communication skills. At the same time, training teaching staff to work with intelligent systems is becoming a prerequisite for the effective digital transformation of education.

Integrating artificial intelligence into research-based learning, which combines theoretical knowledge with scientific enquiry in practice, is of significant importance. Intelligent systems can analyse scientific sources, simulate experiments, process large datasets and formulate hypotheses. This approach helps students to develop scientific thinking skills, boosts their motivation to learn, and enhances their ability to solve complex problems independently. However, it is also crucial to strike a balance between using automated tools and developing students' own research competencies.

A key area for future research is the economic evaluation of implementing artificial intelligence in higher education. Both a macro-level analysis of the education system as a whole and a micro-level analysis of individual universities should be carried out. The costs of software development, staff training, and technical infrastructure must be taken into account, as well as potential benefits, such as improved educational quality, reduced administrative costs, and increased competitiveness of educational institutions.

Another promising area of research is the socio-cultural consequences of introducing artificial intelligence. Technological changes affect the structure of employment, professional mobility, and society's value system [9]. This, in turn, creates new demands for educational content. Universities must ensure the training of specialists capable of working in the digital economy, interacting with intelligent systems and making responsible decisions in conditions of uncertainty.

Further development of artificial intelligence in higher education requires a comprehensive, interdisciplinary approach combining technological innovation and pedagogical tradition. The implementation of intelligent systems must be based on interdisciplinary research and broad dialogue among academics, lecturers, students, and technology developers. Only under such conditions can artificial intelligence become an effective tool for modernising education, contribute to the development of universities' research potential, and ensure the training of a new generation of specialists capable of innovative activity in a global digital environment.

Particular attention must be paid to institutional strategies for implementing artificial intelligence in

higher education. This concerns not only the specific use of individual digital services but also the development of a comprehensive digital development policy for the university, which involves integrating intelligent systems into teaching, research, and administrative activities. This strategy must be based on clearly defined objectives and performance indicators, along with mechanisms for monitoring and evaluating results. It is important to align technological capabilities with educational needs to avoid introducing innovations based on developers' proposals rather than the academic community's actual demands.

An essential element of digital transformation is establishing an appropriate regulatory framework. The regulation of artificial intelligence in higher education should address issues such as academic integrity, copyright, the protection of personal data, transparency in algorithms, and the accountability of automated decision-making [13]. However, excessive regulation can stifle innovation, so it is paramount to strike a balance between the freedom to experiment and legal safeguards.

Alongside technological changes, educational content is undergoing a transformation. In light of the growing presence of artificial intelligence in the economy and social sphere, universities must incorporate subjects related to digital literacy, data analysis, the ethics of artificial intelligence, and interdisciplinary approaches to solving complex problems into their curricula. Developing such competencies will enable the training of specialists who can not only use intelligent tools but also critically assess their capabilities and limitations.

At the same time, the humanistic dimension of education must also be considered. Technological modernisation should not be limited to a technocratic approach that measures efficiency solely by the speed of information processing or cost reduction. Education fulfils a broader social function, playing a part in shaping worldviews, value systems and social responsibility [8]. Therefore, the integration of artificial intelligence must be in accordance with the principles of academic freedom and respect for students' individuality, while preserving space for creative dialogue between teachers and learners.

Further empirical research should aim to identify the actual impact of AI systems on teaching quality, student motivation and educational outcomes. Methodologies must be developed to measure the effectiveness of AI use, accounting for both quantitative indicators and the qualitative characteristics of the educational process. This will enable us to shift from merely acknowledging the potential of innovation to making well-founded management decisions.

Therefore, the integration of artificial intelligence into higher education is a complex, multifaceted process that encompasses technological, pedagogical, economic, and ethical aspects. The success of this integration depends on educational institutions' ability to engage in strategic planning and interdisciplinary collaboration, while preserving the humanistic foundations of the academic tradition. In the long term, AI could be a catalyst for qualitative changes in higher education, helping to create a flexible, adaptive, innovation-oriented model that meets the challenges of the digital age.

As the academic debate progresses, fostering a culture of responsible AI use in academia becomes particularly important. The rapid proliferation of generative models and analytical platforms is transforming not only the technological tools of learning but also the very logic of knowledge creation and dissemination. This

requires universities to develop new standards of academic integrity that take into account the possibilities of automated text generation, data analysis and the creation of research materials. A key aspect of this is the development of students' skills in correctly using intelligent systems to enhance their analytical potential rather than replace it [3].

At the same time, the transformation of the educational process by artificial intelligence requires the development of new teaching methods. Traditional lecture-seminar formats are gradually being supplemented by interactive digital environments, where students can interact with intelligent systems, conduct research and receive personalised feedback. These approaches facilitate the shift from rote learning to constructivist models that focus on independent information-seeking, analysis, and synthesis.

It is also important to consider the international context of the digital transformation of education. The globalisation of the educational landscape and the development of distance learning and massive open online courses (MOOCs) intensify competition between universities, encouraging them to adopt innovative technologies. In this environment, artificial intelligence is becoming a key tool for making educational programmes more competitive, expanding access to knowledge, and ensuring the inclusivity of learning. Adaptive systems can significantly facilitate learning for students with special educational needs and international students facing language or cultural barriers [10].

A promising area is the integration of artificial intelligence into the management of universities' research activities. Intelligent systems can be used to analyse research publications, identify interdisciplinary links, predict promising areas of research, and optimise resource allocation. These tools can improve the efficiency of research teams and accelerate the innovation process while preserving the researcher's key role as a source of creative and critical thinking.

In the context of universities' social responsibility, it is also important to ensure the accessibility of artificial intelligence technologies. Inequality in digital infrastructure development can exacerbate educational inequality between regions and social groups. Therefore, government education policy should be aimed at supporting universities in modernising their technical infrastructure, training staff, and creating open educational resources. This will ensure equal opportunities for all learners and contribute to creating an inclusive educational environment.

The further development of artificial intelligence in higher education generally requires systematic coordination between researchers, educators, government bodies and technology developers. Only by integrating scientific research, pedagogical experience and innovative solutions can an effective educational model be created that combines technological excellence with humanistic values. Such a model can ensure the training of a new generation of specialists who are capable of creative activity, critical thinking, and the responsible use of intellectual technologies in professional and social practice.

Further reflection on the role of artificial intelligence in higher education requires a return to the philosophical and epistemological foundations of the educational process. Intelligent systems change not only the tools used to work with information, but also our

understanding of the nature of knowledge, how it is constructed and the criteria by which it is judged to be true. In the digital environment, knowledge increasingly emerges as a dynamic, network-organised structure, accessible through algorithmic mechanisms. In this context, developing students' metacognitive skills and their ability to reflect on and recognise the limitations of automated solutions becomes paramount.

The evolving nature of cognitive activity requires a re-evaluation of the learning outcomes established by higher education standards [4]. Whereas the emphasis was previously mainly on acquiring a certain body of knowledge, in the context of the spread of artificial intelligence, the ability to interpret algorithmic results, critically assess their accuracy, identify potential biases, and make responsible decisions has become of key importance. Therefore, the competence-based model of education must incorporate components of algorithmic literacy and ethical responsibility regarding the use of intelligent technologies.

Human-AI interaction in the educational environment is a particularly important issue. The success of such interaction depends not only on the technical characteristics of the systems, but also on the level of trust students and teachers have in them. This trust can be built if algorithms are transparent, their operating principles are understandable, and automated decisions can be challenged. Consequently, there is a need to develop 'explainable artificial intelligence' mechanisms that ensure the interpretability of results and facilitate the integration of technologies into pedagogical practice without compromising the autonomy of those involved in the educational process.

It is equally important to consider the psychological aspects of using intelligent systems. On the one hand, adaptive digital environments can boost motivation by providing timely feedback and support. On the other hand, excessive reliance on automated prompts can reduce independence and responsibility for learning outcomes. Therefore, it is necessary to develop pedagogical scenarios that combine artificial intelligence capabilities with active learning methods to stimulate independent thinking and collaborative interaction.

From a strategic perspective, integrating artificial intelligence can help shape a new model of the university as an open innovation platform [5]. Such a university functions not only as an institution for the transfer of knowledge, but also as a centre for the creation of intellectual products, the generation of research ideas, and interdisciplinary collaboration. Intelligent technologies can support this process by facilitating rapid information exchange, providing analytical support for decision-making, and integrating educational and scientific activities.

Thus, the further development of artificial intelligence in higher education is linked to a profound transformation of the educational environment. This transformation encompasses the content of teaching, the organisation of research activities, management processes, and the value system of the academic community. Maintaining a balance between technological innovation and the humanistic orientation of education is a key factor in the success of these changes. Only by harmoniously integrating intelligent systems with human creativity can university education be sustainably developed in the digital age.

Further analysis of the issues surrounding the implementation of AI in higher education should focus on inter-institutional cooperation and on the formation of networked educational and scientific communities. Universities are increasingly participating in global partnerships that bring together academic institutions, business organisations, and research centres. Intelligent systems can facilitate the coordination of joint research projects, the exchange of educational resources, the development of joint specialist training programmes, and the creation of innovative technologies. This integration improves the quality of education and enhances universities' scientific potential.

In this context, an important direction is the development of open educational and scientific platforms that leverage the capabilities of artificial intelligence to process large amounts of information, systematize scientific knowledge, and create interactive educational resources. Such platforms can provide access to electronic libraries, remote access laboratories, simulation models, and training courses, significantly expanding the capabilities of students and researchers regardless of their geographical location. At the same time, there is a need to standardise data formats and information exchange methods to ensure the interoperability of digital systems across different educational institutions.

Another important issue is training management personnel for the digital transformation of universities [11]. Heads of educational institutions must have not only administrative competencies, but also an understanding of the principles of operation of intelligent technologies, economic models of their implementation and social consequences of use. The formation of such personnel potential is possible through specialised training programs, interdisciplinary research and participation in international educational projects.

It is also important to consider the long-term consequences of using artificial intelligence for the structure of academic knowledge. Intelligent systems facilitate the rapid dissemination of information and interdisciplinary integration, potentially leading to the emergence of new scientific fields and the transformation of traditional disciplines. Universities must be prepared for these changes by adapting their curricula and research strategies to new conditions. They must also ensure the flexibility of educational trajectories and enable continuous knowledge updating throughout life.

**Conclusions and prospects for further research in this area.** In conclusion, it should be noted that artificial intelligence is not only a technological tool but also a driving force behind the profound transformation of educational culture. Its introduction into higher education opens up the prospect of increasing the efficiency of the educational process, developing research activities, and expanding access to knowledge. However, it also poses new ethical and social challenges to society. These challenges require a systemic scientific policy that combines innovation with the humanistic values of education, ensuring a harmonious interaction between humans and technologies in shaping the future of university science and education.

Further research should focus on conducting an in-depth empirical analysis of the effectiveness of using artificial intelligence in education and assessing its impact on educational quality, academic success, and student motivation.

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## ВІДОМОСТІ ПРО АВТОРІВ

**ВЕДЬ Тетяна** – викладач кафедри педагогіки, іноземної філології та перекладу Харківського національного економічного університету імені Семена Кузнеця.

**Наукові інтереси:** інтеграція штучного інтелекту у вищу освіту як чинник модернізації освітнього середовища.

**ЛЮТВИЄВА Ярослава** – старший викладач кафедри педагогіки, іноземної філології та перекладу Харківського національного економічного університету імені Семена Кузнеця.

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