

## **PROSPECTS OF LEGAL REGULATION OF EDUCATIONAL AI RELATIONS**

***Kirin Roman***

*Doctor of Law Sciences, Professor, Leading researcher, State Organization V. Mamutov IELR of the NAS of Ukraine*  
ORCID ID: 0000-0003-0089-4086

***Khomenko Volodymyr***

*Ph.D. of Technical Sciences, Docent, Associate Professor of the OGED Department, Dnipro University of Technology*  
ORCID ID: 0000-0002-3607-5106

***Pashchenko Oleksandr***

*Ph.D. of Technical Sciences, Docent, Director of the MIBO Institute, Associate Professor of the OGED Department, Dnipro University of Technology*  
ORCID ID: 0000 0003 3296 996X

In recent years, the introduction of artificial intelligence (hereinafter - AI) in the educational sphere has become not only a technological trend, but also an important stage in the development of the education system. AI can transform traditional teaching methods, improving the effectiveness of the educational process and adapting it to the individual needs of both education seekers and subjects of educational activity (hereinafter referred to as SOD). AI technologies can provide personalized learning, automate the assessment of knowledge and analyze educational data, which in turn contributes to the improvement of the quality of education. However, along with potential advantages, new challenges arise, including in the field of legal regulation of AI-relations.

As AI technologies become more common, it is important to consider the legal regulations that govern their use. This includes the issue of personal data protection (hereinafter referred to as Personal Data Protection), copyright on AI objects, as well as ethical aspects related to learning automation. In this context, there is a need for a detailed analysis of the legal field related to the use of AI in education in order to ensure optimal efficiency and safety of its implementation.

In the process of research, it is proposed to consider modern legal norms, challenges and prospects that will allow to optimize the implementation of AI in education, while ensuring compliance with legal prescriptions and ethical standards.

The implementation of AI in the educational sphere shows rapid development, because AI technologies are becoming more and more accessible and diverse. Educational institutions actively integrate these technologies into the educational process in order to increase the effectiveness of education, adapt materials to the needs of students and simplify administrative tasks [1].

The current state of implementation of AI in education demonstrates the active use of relevant technologies in educational institutions of various levels. In

particular, AI is used to personalize the educational process, automate administrative tasks, analyze educational data, and improve interaction between providers and recipients of educational services. Innovative AI platforms allow creating individualized learning trajectories, adapting materials to the needs and capabilities of each student [2].

When conducting an overview of the use of AI in the SOD, it is worth noting that today there are many platforms and tools that provide interactive learning. For example, adaptive learning systems analyze the progress of students and automatically adjust the difficulty of tasks, which increases the effectiveness of learning [3]. Such technologies as chatbots are actively used to provide consultations, answering the questions of applicants in real time.

In addition, computer vision technologies are used to analyze the behavior of students during classes, which can help teachers identify learning problems. The use of virtual and augmented reality in the educational process has also become popular due to its ability to create interactive and engaging learning environments. Thus, the implementation of AI in education opens up new horizons for education, increasing its effectiveness and accessibility.

The legal basis for the implementation of AI in the educational sphere is critically important to ensure the ethical, safe and effective use of these technologies. National legislation should provide a legal framework for the implementation of AI in education, where important elements are, first of all, acts of educational legislation. Yes, the current Law of Ukraine "On Education" in mid-2022. was supplemented by Art. 74-1, which establishes the legal regime of the automated information complex of educational management, but there is no mention of the use of AI at the moment. Instead, the Concept of AI development in Ukraine [4], emphasizing the need to develop a single coordinated state policy aimed at solving priority problems, singles out among the latter: - the absence or imperfection of legal regulation of AI, including in the field of education; - insufficient level of quality of higher education and educational programs aimed at training specialists in the AI field in institutions of higher education (hereinafter - higher education institutions); - lack of modern training programs for higher education teachers in the AI field; - low level of investment in AI research in higher education institutions, etc. In addition, it is believed that educational legislation should contain provisions that allow the use of the latest technologies in educational processes, including AI, as well as determine exactly how intelligent systems can be integrated to automate learning or evaluate students.

At the same time, the legislation on ZPD, which is a constituent institution of information legislation, should play a key role in the regulation of AI relations, since such laws as the General Data Protection Regulation (EU) 2016/679, hereinafter - GDPR) in the EU or the Law of Ukraine "On the Protection of Personal Data" regulate legal relations related to processing and personal data protection, which can be classified as confidential information [5]. This is especially relevant in the context of the use of AI, since many technologies require access to large amounts of data. National authorities should also develop ethical codes that will determine the rules of conduct of

participants in the educational process in connection with the use of AI, in order to ensure fairness, transparency and accountability in educational AI relations.

In particular, the Concept of the State targeted scientific and technical program for the use of AI technologies for the period until 2026. [6] determined that education, vocational training, and science are priority areas in which the tasks of state policy regarding the development of the AI industry are fulfilled. Among the ways and methods of solving modern problems, the creation of AI-centers or AI-laboratories on the basis of scientific institutions and higher education institutions, consulting enterprises that will provide services for the development, testing, and training in the use of AI-technologies is foreseen. For this purpose, the Ministry of Digital Transformation of Ukraine has developed a Roadmap for the regulation of AI in Ukraine (Bottom-Up Approach), in which it was declared that there is no desire to regulate the AI market, instead – to find a balance between the interests of business and ensuring an adequate level of protection of citizens from AI risks. Sooner or later, Ukraine will have to implement AI-acts of the EU as one of the conditions of European integration in the digital sphere.

The first practical European step towards strengthening legal standards in the field of development and use of AI was the adoption on February 17, 2017. Resolutions of the European Parliament on the civil-law regulation of robotics [7], which emphasize the need to develop general concepts of the terms "cyber-physical systems", "intelligent autonomous robots" taking into account such features as: - the ability to be autonomous and exchange data; - ability to learn based on acquired experience; - availability of minimal physical support; - the ability to adapt to the external environment; - lack of life.

In addition, at the international level, there are numerous documents and recommendations that help regulate the implementation of AI in education. For example, UN conventions and UNESCO guidelines emphasize the importance of access to education, and UNESCO guidelines on the use of new technologies in education provide a framework for ensuring the ethical and equitable use of AI. International organizations, such as the Organization for Economic Co-operation and Development, are developing guidelines for the implementation of innovations in SOEs, which may include the use of AI. Also, international associations working in the field of education can develop ethics standards that ensure the ethical use of AI in the educational process [8].

A year ago (November 2023), during the first ever international AI Safety Summit held in Great Britain, Ukraine signed "The Bletchley Declaration", the main goal of which is to activate the international cooperation in the field of AI-security research.

Finally, on August 1, 2024. the innovative EU Regulation on the Regulation of AI (The EU AI Act) entered into force, which introduced a risk-oriented approach to the application of AI technology. However, low- or no-risk technologies will not fall under the regulation, but a subset of potential AI applications classified as high-risk, such as biometrics and facial recognition, AI-based medical software or AI used in areas such as education and employment, must be registered in the EU database

and comply with the requirements for risk management and quality with the possibility of passing a regulatory audit [9].

Therefore, the implementation of AI in the educational sphere is accompanied by numerous legal challenges and risks that require careful analysis and regulation. One of the main problems is the confidentiality and privacy of education seekers. The use of AI technologies involves the collection, processing and storage of a large amount of personal information, which increases the risks of unauthorized access or misuse of data [10]. This applies in particular to systems that analyze educational achievements, behavior and other aspects, which may violate the fundamental rights and freedoms of applicants, namely, the right to non-interference in their personal life. In this regard, when regulating this block of educational and information relations, it is important to ensure compliance with the norms of national and international legislation on personal data protection, including GDPR.

The second significant legal problem is the issue of intellectual property, in particular the authorship of educational materials created with the help of AI. When AI generates educational content, it becomes difficult to determine the rights to these works. Is the author the person who developed the algorithm, or the system itself, which performed the creative process? The answer to this question requires new legal norms that would clearly define who owns the rights to AI products in order to avoid legal disputes and ensure fair compensation for all participants in the creative process.

Defining standards of ethical behavior for the use of AI in education is also an important task. Standards may include principles of fairness, transparency, accountability and non-discrimination. For example, HEIs can develop codes of ethics that clearly define how AI can be used to support the educational process while protecting the interests of learners. These codes should also include requirements for privacy, non-discrimination and accessibility of technology for all users, regardless of their physical, social and economic status.

An important component of ethical regulation is also raising the awareness of educational institutions and students about the potential ethical risks associated with the use of AI. This may include training on ethical issues, conducting seminars, and creating informational materials that will help participants in the educational process better understand how to properly use AI technologies while maintaining ethical principles [11].

Further, given the rapid development of technologies, proposals for improving legal norms should include the creation of mechanisms for monitoring and evaluating the impact of AI on educational processes. Therefore, it is necessary to develop and adopt normative acts that will regulate the audit procedures of AI technologies used by the SOD. Regulated inspections should ensure the compliance of AI technologies with ethical standards and legal norms, as well as allow timely identification of possible risks.

Thus, the prospects for legal regulation of the introduction of AI in education are the need to adapt legislation to new technologies, develop new control

mechanisms, and improve legal norms that would ensure the effective and ethical use of AI in the educational process. This will not only improve the quality of education, but also protect the rights and interests of all participants in the educational environment.

Thus, the analysis of the legal aspects of the introduction of AI in the educational sphere made it possible to draw several key conclusions. First, the implementation of AI in education opens up new opportunities for improving the educational process, but at the same time it raises a number of legal challenges, such as issues of privacy, personal data protection, and intellectual property issues. Secondly, the current legislation frankly does not keep up with the rapid changes in AI technologies, which requires an urgent legal response.

In addition, the issue of ethical regulation is important, because ethics and law must work in close relationship to ensure not only technological progress, but also the protection of the rights of all participants in the educational process. Lack of clear standards can lead to abuse and negative consequences. In this regard, for further research and development in the field of legal regulation of AI in education, it is recommended:

1. Analysis of existing legislation to identify gaps and shortcomings in the context of AI implementation, implementation of European AI legislation.
2. The development of new legal norms that take into account the specifics of the use of AI in education, in particular, regarding the processing of personal data and copyrights to educational materials.
3. Creation of interdisciplinary groups that will bring together lawyers, educators and representatives of technology companies to jointly develop standards of ethical and legal regulation.
4. Conducting educational campaigns to raise the awareness of SOD and education seekers about rights and responsibilities in connection with the use of AI.
5. Integration of ethical norms into the legal regulation of the use of AI in education in order to ensure a balance between innovation and ethical standards.

These recommendations will help promote the effective and safe use of AI in the educational sphere, as well as ensure legal and ethical protection of all participants in the educational process.

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