



THE ROLE OF ARTIFICIAL INTELLIGENCE IN INCREASING THE OBJECTIVITY OF ASSESSING THE PROFESSIONAL ACTIVITIES OF TEACHERS IN GENERAL SECONDARY EDUCATION INSTITUTIONS

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Abstract

Relevance. The objectivity of assessing the professional activities of teachers is an urgent task in modern education. This is due to dynamic changes in the organization of the educational process and increasing demands on the professional competence of teachers. Traditional methods of assessing teachers' professional activities are often subjective and do not fully reveal the level of their knowledge, skills, and abilities. In this context, artificial intelligence (AI) offers tools for more accurate, transparent, and comprehensive assessment of teachers' professional activities based on the analysis of data on teaching quality, their interaction with general secondary education students, and learning outcomes.

Purpose. This article aims to investigate the role of artificial intelligence in increasing the objectivity of assessing the professional activities of teachers in general secondary education institutions.

Methods. The research employed the following methods: analysis of scientific sources and regulatory documents concerning the use of artificial intelligence technologies in education to identify the current state of research on the problem; theoretical analysis, synthesis, and generalization of views to substantiate the role of artificial intelligence in the objective assessment of the professional activities of teachers in general secondary education institutions; and generalization of conclusions.

Results. The study substantiates the role of artificial intelligence in enhancing the objectivity of assessing the professional activities of teachers in general secondary education institutions. This is achieved through the use of big data processing algorithms and comprehensive analytics, automation of the collection and analysis of quantitative and qualitative indicators of teachers' professional activities, analysis of their interaction with students, analysis of the dynamics of competence development, learning materials (through natural language processing), and student learning outcomes. The research also reveals the features of using artificial intelligence in assessing teachers' professional activities by personalizing tasks and providing individual recommendations for their further professional development. Furthermore, it identifies the key advantages and challenges associated with using artificial intelligence in assessing the professional activities of teachers in general secondary education institutions.

Conclusions. The use of artificial intelligence significantly increases the **objectivity, effectiveness, and transparency** of assessing the professional activities of teachers in general secondary education institutions. It enables a shift from quantitative assessment criteria to comprehensive analysis and facilitates the formation of individual trajectories for their professional growth. Successful implementation of artificial intelligence in assessing teachers' professional activities is based on considering unified methodological approaches and standards, as well as the availability of appropriate technical infrastructure.

Keywords: *artificial intelligence, assessment, professional activity, teachers, objectivity, digital technologies, personalization, assessment standards.*

Introduction. The objectivity of assessing the professional activities of teachers is one of the most pressing issues in the field of general secondary education (Malá, Gadušová, & Pavliková, 2020). In a context of dynamic changes and increasing demands on teachers' professional competence, there is a growing need for a comprehensive approach to evaluating their work. Traditional methods of assessing the quality of teachers' professional activities are often influenced by subjective factors and fail to reveal all their aspects. In this regard, artificial intelligence (hereinafter referred to as AI) offers modern tools for data collection and analytics that contribute to more accurate and transparent assessment (Cardona, Rodríguez, & Ishmael, 2023). The implementation of AI in the assessment of teachers' professional activities is based on the use of big data processing algorithms and comprehensive analytics. This enables the collection of detailed information on teaching indicators, communication with students, and their learning outcomes. The application of such tools allows for a more prompt response to identified competency gaps and the determination of individual professional development pathways for each teacher. This increases the transparency of the assessment process, as quantitative and qualitative parameters of their activity are aligned with the actual learning success indicators of students.

To enhance the objectivity of assessing teachers' professional activities, evaluation based on interactive platforms that include personal accounts for storing methodological materials and completed assignments is effective (Dornisch, & McLoughlin, 2006). While such platforms are user-friendly, there is a risk of focusing unilaterally on quantitative indicators that do not always reflect the full depth of teaching activity. In most cases, there is a lack of algorithms capable of identifying specific features of teaching style and the level of interaction with students. This leads to a significant discrepancy between formal indicators and the actual level of a teacher's professional activity. The limitations of traditional assessment stem from the use of insufficiently effective methodologies that do not account for disciplinary differences and personal

characteristics of teachers. The absence of common standards for analyzing digital indicators complicates inter-school comparison and data exchange. Moreover, individual approaches of different educational institutions are not always consistent with common quality criteria, creating difficulties in formulating unified conclusions. Another challenge is maintaining the confidentiality of personal data and the need to build a reliable digital infrastructure.

Against these challenges, the need to define the role of AI in improving the traditional assessment of teachers' professional activities becomes critical. Compared to humans, machine learning algorithms and neural networks are capable of analyzing a much wider range of indicators, including the dynamics of a teacher's competence development and the structure of their interaction with students, in the shortest possible time (Cardona, Rodríguez, & Ishmael, 2023). AI enables the accumulation and systematization of information covering both quantitative and qualitative aspects of a teacher's professional activity. In the future, this approach will contribute to increasing the objectivity of assessing teachers' professional activities, focusing on their real contribution to student learning progress. Ultimately, defining the role of AI in teacher professional activity assessment systems focuses on creating conditions to reduce subjective influences and deepen analytical capabilities. It is through technological innovations that tools emerge, designed to more accurately track teaching quality, supporting teachers in the process of improving their pedagogical skills.

Sources. The use of AI in all areas of national importance is based on the provisions of the Concept and National Strategy for AI Development in Ukraine (On Approval of the Concept for the Development of Artificial Intelligence in Ukraine, 2020), as well as the corresponding Action Plan for their implementation (Order of the Cabinet of Ministers of Ukraine, 2021, May 12). Specifically, the Concept defines the principles for increasing Ukraine's competitiveness through the use of AI technologies (human-centeredness, adherence to the rule of law, respect for fundamental human rights

and freedoms, transparency, security, and accountability of AI systems). Among the priority areas for the Concept's implementation are education and human capital development, scientific research, etc. The Concept also identifies a number of problems that need to be addressed. In the educational sector, these include: a low level of digital literacy among the population, imperfect legal regulation of the AI sphere, a low level of investment in research and development, and certain shortcomings in the system of specialist training. To address these in general secondary education, the conceptual provisions foresee tasks such as: improving the educational and methodological base; organizing courses for teachers on working with analytical data; promoting digital literacy among schoolchildren (using digital tools to solve applied problems, searching for information on the Internet, personal data protection, media literacy, digital hygiene, etc.) (Order of the Cabinet of Ministers of Ukraine, 2020, December 02).

The National AI Development Strategy in Ukraine, with a perspective up to 2030 (OECD.AI Policy Observatory, 2021), outlines ambitious goals, such as ensuring sustainable economic development and bringing Ukraine to a leading position in the world in the field of information and communication technologies through the effective implementation of AI. Its key tasks include: organizational and financial support for scientific research, software development, increasing data accessibility and computing infrastructure, training qualified personnel, and creating a national AI ecosystem. The Ministry of Digital Transformation of Ukraine and the Ministry of Education and Science of Ukraine are actively involved in the development of the educational sector based on the use of AI technologies. An example of this is the launch of a national project to provide Ukrainian schools with access to ChatGPT Edu starting from 2025 (Ministry of Digital Transformation of Ukraine, n.d.), as well as supporting the development of educational courses for citizens to increase digital literacy. In addition, instructional and methodological recommendations developed by employees of these ministries regarding the introduction and use of AI technologies in general secondary education institutions are valuable (Ministry of Education and Science of Ukraine, 2024, May 22; Pinchuk, 2024).

These recommendations are based on the principles of fairness and inclusivity, legality and transparency, as well as confidentiality and security. They emphasize the importance of forming AI competence in teachers as a component of their professional competence.

In shaping its national policy and legislation in the field of AI, Ukraine actively aligns with international and European standards. In this context, the European Union's Artificial Intelligence Act (EU AI Act) (AI Act enters into force, 2024), adopted by the European Parliament on March 13, 2024, holds significant importance. This document introduces a risk-based approach to AI regulation, classifying systems by risk levels: unacceptable, high, limited, and minimal. The Act establishes strict requirements for transparency, accountability, and security of AI systems, especially those categorized as high-risk. It also explicitly prohibits certain types of AI systems, such as social scoring systems used by public authorities, or emotion recognition systems in educational institutions and workplaces (with some exceptions). Ukraine has expressed its intention to implement the provisions of this Act into its legislation, which will require significant work on adaptation and the development of new legal norms.

The theoretical foundations of assessing teachers' professional activities, including with the use of AI, have been explored in the works of domestic and foreign scholars. Specifically, S. V. Berezhna and S. O. Dotsenko (2025) identified and substantiated key areas of professional training for teachers in the field of AI: technical, methodological, ethical, and practical. The authors highlighted key components of a teacher professional training system, namely: modularity and flexibility of educational programs; a practice-oriented approach; collaborative learning; continuous monitoring and updating of program content; and the integration of formal and non-formal education through participation in master classes, webinars, conferences, trainings, etc. H. Yu. Kravchenko (2012) substantiated the specifics of assessing the level of teachers' professional competence, which the researcher includes: accounting for teachers' needs according to their professional interests and level of professional training, creating conditions for systematic self-education throughout the entire inter-certification

period, and ensuring continuity of professional development.

O. Hrytsenchuk's (2024) research on modern AI technologies already partially used in education is of scientific interest. The researcher includes expert systems, chatbots, intelligent tutors, personalized learning systems, visualizations and virtual learning environments, machine learning technologies, etc., among these technologies. She proposed key directions for using AI in education, the essence of which lies in supporting the educational sector, namely: personalization of learning, use of intelligent assistant systems, learning analytics, automation of routine tasks, and innovative teaching methods using AI systems. I. V. Bubnov (2023) proposed practical approaches to implementing VR tools based on AI technologies in the domestic educational sphere, identifying that these are: first, software developed to support teachers, not replace them; and second, they require educators to have a certain level of knowledge and skills to use such projects. Regarding technological solutions based on AI technologies that can help organize the educational process, researchers recommend various assessment tools, the production of personalized comments and feedback, and, for example, systems for creating and coordinating schedules (Pasichnyk, 2023).

O. M. Spirin and M. P. Shyshkina (2025) paid special attention to the problem of natural language processing (NLP) in communication. According to the researchers, NLP technology enables the analysis of written and oral statements by students, identifying linguistic patterns and improving teaching methods. For example, chatbots based on NLP can assist in learning, answer questions, and evaluate responses. This is extremely important in the aspect of assessing the professional activities of teachers in general secondary education institutions. O. P. Radkevych (2024) substantiated the prospects of integrating AI into the assessment of teachers' professional activities in general secondary education institutions, as well as the sequence of creating an AI-based assessment model that includes goals, data collection and processing, trial, testing, and actual assessment. Regarding the impact of AI on the formation of an open educational environment of an educational institution, the research results of N. I. Vodop'yan

(2023) are important, as she substantiated approaches to using cloud services and AI technologies in educational processes. The results of scientific research on the use of electronic portfolios in the teacher certification process (Electronic teacher portfolio, 2024) deserve attention. For example, AI-based platforms and resources are recommended in materials supporting teacher certification (McFarland, 2025).

The works of American researchers Derrington, M. L. and Campbell J. W. (2018) are of scientific interest. Over a five-year period, they analyzed the implementation of new teacher professional activity evaluation policies by school principals in suburban and rural southeastern regions of the United States. They concluded that mandatory strict evaluation policies do not sufficiently account for teacher effectiveness and can complicate school principals' leadership. The authors argue that policies should consider the long-term consequences of implementation before yielding significant results in teacher evaluation. José Felipe Martínez, Jonathan Schweig, and Pete Goldschmidt (Martínez et al., 2016) substantiated approaches to combining several indicators of teacher performance: accuracy, reliability, validity, and consequences for evaluation policy. They found that, for example, accuracy varies across different models and truncated scores, and that models with the same accuracy can yield different teacher classifications. The specifics of teacher evaluation and self-evaluation during the educational process were studied by Bajrami V. and Kurejsepi E. (2024). The authors concluded the importance for teachers to learn from their own practice. At the same time, experimental and reflective approaches to learning involve a change in the role of teachers, and only in the second stage, the application of specific methods and techniques suitable for encouraging experimental learning.

Purpose: To investigate the role of artificial intelligence in increasing the objectivity of assessing the professional activities of teachers in general secondary education institutions.

Methods: The research employed the following methods: analysis of scientific sources, legislative, and regulatory documents concerning the use of artificial intelligence technologies in education to identify the current state of the research problem; theoretical analysis and synthesis,

generalization of views on the investigated problem to substantiate the role of artificial intelligence in the objective assessment of the professional activities of teachers in general secondary education institutions; and generalization of conclusions.

Results and Discussion. Assessing the professional activities of teachers is a crucial factor in improving the quality of education, as it determines their level of competence, teaching effectiveness, and ability to adapt to modern challenges. Traditional assessment methods, based on observations, expert opinions, and self-assessment, have a number of limitations, including subjectivity and insufficient systematic analysis of results (Na urok, 2021). Modern approaches to assessing professional activity are evolving towards the integration of digital technologies, which allows for a more detailed analysis of pedagogical effectiveness and the formulation of personalized recommendations for improving teaching skills (Kovalskiy & Kyslenko, 2024). The implementation of AI-based electronic assessment is grounded in various conceptual approaches that ensure a comprehensive study of teaching quality, contributing to the creation of transparent and objective mechanisms for evaluating professional activity. In this context, the competency-based, activity-based, and axiological approaches are of particular importance, forming the basis for analyzing and improving the professional activities of teachers. Specifically, the **competency-based approach** involves assessing a teacher's knowledge, skills, and abilities in accordance with modern educational standards. The **activity-based approach** focuses on the teaching process, including teaching methods, organization of the educational process, and ways of interacting with students. The **axiological approach**, in turn, focuses on the moral, ethical, and value orientations of the teacher, which influence the formation of their professional culture and the ability to educate students in accordance with societal norms (Sikora, 2011).

The assessment of teachers' professional activities is traditionally carried out using methods that include expert evaluation, self-assessment, student surveys, and administrative control. These methods have certain advantages, such as the ability to consider the experience and professional

judgments of experts, but at the same time, they are subjective, poorly representative, and dependent on external factors. Consequently, modern educational practice increasingly employs **digital technologies** for assessing teachers' professional activities, which allow for obtaining more accurate and objective data, excluding human influence and ensuring greater transparency of the assessment process.

The advantages of AI-powered assessment compared to traditional methods include the speed of data processing, the possibility of long-term monitoring of teachers' professional development dynamics, the objectivity of analyzing professional activity effectiveness indicators, and personalization of educational recommendations (Euro Osvita, 2011). Through the implementation of digital platforms, assessment is carried out not only based on students' final learning outcomes but also on the quality of methodological support, the level of interaction with them, and the teacher's innovative activity. In this context, AI plays a key role, enabling the automation of data collection, analysis, and interpretation, which significantly enhances the objectivity of assessing the professional activities of teachers in general secondary education institutions amidst dynamic changes and increasing demands for pedagogical mastery (Ministry of Education and Science of Ukraine, 2024).

Modern approaches to using AI in assessing the professional activities of teachers in general secondary education institutions are based on interactive platforms that include personal accounts for storing methodological materials and results of completed assignments.

The concept of AI in the field of teacher professional activity assessment characterizes technology that uses algorithms to process information and formulate substantiated conclusions. AI implies the system's ability to imitate human cognitive functions and autonomously improve based on received data (Ministry of Education and Science of Ukraine, 2024). By virtue of its ability to analyze large volumes of information, AI opens new prospects for increasing the accuracy and objectivity of assessment. This technology allows for avoiding subjective factors and forming a more transparent system for evaluating pedagogical activity indicators. The focus on AI in the context of

educational assessment highlights the possibility of remote control of professional competence based on the use of digital tools. AI-based educational systems are capable of analyzing the dynamics of student success, the level of teacher involvement in joint activities, and the impact of innovative teaching methods. The key element becomes **automated data processing**, which reduces the level of errors and minimizes the human factor.

The central AI method is **machine learning**, which is capable of identifying patterns in data arrays and predicting future trends. The application of this approach enables the creation of automated assessment models that adapt to changing educational environment conditions. Big data analysis using machine learning algorithms involves identifying correlations between pedagogical strategies and student learning outcomes. Such methods demonstrate high effectiveness in determining individual pathways for teachers' professional development. **Neural networks** represent a deeper variety of machine learning, as they mimic the work of the human brain and learn through multiple iterations (Machine learning, 2024). This leads to the formation of complex models capable of distinguishing non-obvious patterns in the professional activities of teachers. Within the assessment of teachers' professional activities, neural networks analyze information about the dynamics of class attendance, the level of student work completion, and the characteristics of interactive interaction. The synthesis of the obtained data allows for identifying specific aspects for improving a teacher's competencies.

In assessing teachers' professional activities, **adaptive testing algorithms** play an important role, enabling the selection of individualized tasks depending on the results demonstrated by the teacher during the assessment (Computerized adaptive testing, 2023). This approach helps avoid "leveling" and obtain quality results regarding the teacher's actual level of competence. Each subsequent test block is formed based on the analysis of previous answers. This contributes to a more detailed identification of the strengths and weaknesses of teachers' professional activities. The use of adaptive testing positively affects the monitoring of their professional activity and stimulates professional self-improvement

(Radkevych, 2023a). Thus, the use of AI in the context of assessing the professional activities of teachers in general secondary education institutions is considered an effective way to increase the objectivity and transparency of this process (Radkevych, 2023b).

Adaptive assessment systems are based on continuous updating of test and methodological tasks, focusing on the individual characteristics of the teacher. They take into account the level of knowledge, work experience, and formed professional profile, gradually adjusting the complexity of the testing. This approach allows for choosing assessment content oriented towards the optimal vector for competence improvement (Topuzov, Malykhin, & Opaliuk, 2018). The result is a targeted assessment of teachers' professional activities that reflects not only the totality of formal indicators but also real progress in professional development.

Automated analysis of professional activity includes **Natural Language Processing (NLP) algorithms** that can analyze educational materials, methodological recommendations, and communication between teachers and students. This technology focuses on recognizing lexical and semantic features, allowing for determining the compliance of digital resources with modern educational standards (AkademProstir, 2024). Algorithms can identify complex topics or problematic fragments of explanations, indicating areas that need refinement. This forms a more objective picture of professional competence, as the assessment is carried out based on the real content of didactic materials.

The use of AI makes assessment systems flexible and maximally aligned with the real needs of general secondary education. Automated analysis simplifies the data collection procedure, while adaptive approaches emphasize the teacher's personal specificity, and in-depth analysis of big data creates the foundation for long-term forecasting of results (Radkevych, 2023a). Such interaction of digital tools allows for reducing the influence of the human factor on assessment and significantly increasing its objectivity. Thus, AI offers a structured yet flexible mechanism aimed at improving the professional activities of teachers in the digital age.

The application of AI eliminates most human errors that arise during traditional assessment. The analysis of professional activity is carried out based on the correspondence of a teacher's actual actions to established criteria, which significantly reduces any bias (Radkevych, 2024). The possibilities of **personalizing** the assessment of teachers' professional activities reveal the potential of an individual approach to developing their professional competencies. By analyzing various components of professional activity, algorithms form a teacher's profile and correlate it with the dynamics of changes in student learning outcomes. On this basis, personalized recommendations are provided to teachers, covering methodological, psychological, and communicative aspects of improving their professional activities. Such flexibility of digital systems increases teachers' motivation and creates additional incentives for creative search for new teaching forms. Further deepening of personalization becomes possible by taking into account the specific circumstances of the educational environment and specific pedagogical goals. AI systematizes data on emotional involvement, methodological diversity, and the effectiveness of applied approaches, thereby ensuring more detailed monitoring of a teacher's actions. This information allows for developing individual self-development trajectories and adjusting recommendations according to the goals of the subject. As a result, every teacher can compare their own achievements with benchmarks that correspond to national and international standards (Radkevych, 2024).

The **speed and accuracy of analysis** lie in AI's ability to process a huge amount of data in minimal time. Automated algorithms extract digital traces left after each educational interaction and convert them into understandable analytical indicators. This allows for real-time response to challenges, promptly assessing the level of professional activity and the effectiveness of pedagogical decisions. Simultaneously, a clear picture of the current needs of educational practice is ensured, which prevents stagnation and promotes dynamic improvement of the teaching staff. The combination of such approaches in assessment systems enhances the effectiveness of quality management in general secondary education.

Educators receive detailed profiles of their activities with specific tips for areas of development, and leaders can make informed decisions regarding personnel policy.

The use of AI in assessing teachers' professional activities raises the issue of **ethical and legal challenges**. The application of algorithms for collecting and storing large volumes of information about teachers requires strict confidentiality rules. Teachers want to be sure that personal information will not become subject to abuse or manipulation. Achieving transparency and compliance with legal norms requires the development of special mechanisms for adhering to ethical principles. Low trust in decisions made by automated systems is due to a lack of clarity in explaining the work of algorithms. Teachers often feel skeptical when they do not understand on what indicators AI determines their professional achievements. Openness and explainability of decisions are critically important to avoid stress and alienation from educators. That is why algorithm developers are increasingly implementing additional modules that allow users to track the logic of the analysis process. The need to adapt AI methods to national educational contexts is explained by the diversity of curricula and cultural and educational traditions (Ministry of Education and Science of Ukraine, 2024).

AI technologies open a new level of integration with digital tools in educational management, creating a unified space for analyzing teachers' professional activities. The synergy of such technologies includes administration tools, distance learning platforms, and electronic journals, which increases the speed and accuracy of data collection. This approach allows for forming a comprehensive vision of teaching quality, as information about academic performance, interaction, and work methods is processed centrally (Dmytruk, 2025). The study of **social skills** that create a trusting atmosphere of cooperation between teachers and students is particularly relevant. AI can track the frequency of verbal and non-verbal contacts, the level of friendly interaction, and partnership forms of group work. Such data determine the dynamics of communicative competence development by analyzing feedback from students. This ensures a broader coverage of factors influencing the educational component of the educational

environment (Pashchenko, 2024). The use of **augmented reality and virtual environments** creates new opportunities for a comprehensive analysis of teachers' professional activities. Virtual reality platforms create simulated classrooms where a teacher can practice complex pedagogical situations, considering the individual needs of students. Augmented reality, in turn, allows for observing the lesson in real time, receiving additional information about student reactions and lesson structure. The combination of these technologies with AI deepens the analysis, focusing on precise indicators of interaction and the results of the created educational environment (Peven, Pletenytska, & Doronina, 2024).

Conclusions. The use of AI in assessing the professional activities of teachers in the context of educational digitalization demonstrates high effectiveness and transparency, contributing to the improvement of general secondary education quality. The results of the study showed that the integration of digital platforms, machine learning algorithms, and big data analytics creates a stable foundation for objective recording of pedagogical activity indicators. Automated mechanisms have simplified the procedure for collecting and analyzing factual information about a teacher's professional activity, eliminating subjective human influence. This approach ensures an increased level of trust among all participants in the educational process and creates new prerequisites for improving the assessment of teachers' professional activities.

An important conclusion of the study is the necessity of transitioning from traditional assessment approaches, which often prioritize quantitative criteria, to a **comprehensive analysis** that includes qualitative indicators. This approach should consider both the content of lessons and methodological diversity, the level of

communication with students, and the effectiveness of pedagogical strategies. The role of **digital platforms** capable of synthesizing a large amount of information about a teacher's specific professional activity in dynamics is of particular importance. The obtained data allow for determining individual development vectors and forming clear strategies for professional growth. In such a paradigm, the teacher's role transforms, becoming a partner in a unified assessment ecosystem.

An essential factor for the successful implementation of AI in the educational sphere is the **transparency and ethics of algorithmic decisions**. The protection of teachers' personal data and the ability to track the logic of decision-making are integral conditions for trust and openness. Developers of electronic platforms must ensure a clear interface and mechanisms for explaining results so that users understand the principles of analysis. Such clarity of methods contributes to the formation of a positive attitude towards innovations and strengthens partnership interaction among all subjects of the educational process.

Based on the research results, it is recommended to deepen the integration of AI into professional activity assessment, focusing on adaptation to national standards and preserving an individual approach. The introduction of a unified methodological base will help standardize quality criteria, and the development of special analytical tools will allow for a systematic approach to formulating recommendations. It is expedient to expand cooperation between scientific institutions, the private sector, and government bodies to create an effective ecosystem where AI ensures modern monitoring of teachers' professional activities. This vector of development strengthens the potential of traditional assessment and forms future prospects for improving teachers' professional activities.

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РОЛЬ ШТУЧНОГО ІНТЕЛЕКТУ У ПІДВИЩЕННІ ОБ'ЄКТИВНОСТІ ОЦІНЮВАННЯ ПРОФЕСІЙНОЇ ДІЯЛЬНОСТІ ПЕДАГОГІЧНИХ ПРАЦІВНИКІВ ЗАКЛАДІВ ЗАГАЛЬНОЇ СЕРЕДНЬОЇ ОСВІТИ

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Реферат:

Актуальність. Об'єктивність оцінювання професійної діяльності педагогічних працівників є нагальним завданням сучасної освіти. Це зумовлено динамічними змінами в організації освітнього процесу та зростаючими вимогами до професійної компетентності педагогічних працівників. Традиційні методи оцінювання професійної діяльності педагогічних працівників часто є суб'єктивними та не розкривають повною мірою рівня їхніх знань, умінь та навичок. У цьому контексті штучний інтелект пропонує інструменти для більш точного, прозорого та комплексного оцінювання професійної діяльності педагогічних працівників на основі аналізу даних про якість викладання, їхню взаємодію зі здобувачами загальної середньої освіти та результати навчання.

Мета статті полягає у дослідженні ролі штучного інтелекту у підвищенні об'єктивності оцінювання професійної діяльності педагогічних працівників закладів загальної середньої освіти.

Методи дослідження: вивчення наукових джерел та нормативно-правових документів щодо використання технологій штучного інтелекту в освіті – для виявлення стану дослідження проблеми; теоретичний аналіз, синтез та узагальнення поглядів – для обґрунтування ролі штучного інтелекту в об'єктивному оцінюванні професійної діяльності педагогічних працівників закладів загальної середньої освіти; узагальнення висновків.

Результати: обґрунтовано роль штучного інтелекту в об'єктивності оцінювання професійної діяльності педагогічних працівників закладів загальної середньої освіти на основі використання алгоритмів обробки великих

даних і комплексної аналітики, автоматизації збору та аналізу кількісних і якісних показників професійної діяльності педагогічних працівників, структури взаємодії зі здобувачами освіти, аналізу динаміки розвитку компетентностей, навчальних матеріалів (шляхом обробки природної мови) та результатів навчання здобувачів освіти; розкрито особливості використання штучного інтелекту в оцінюванні професійної діяльності педагогічних працівників шляхом персоналізації завдань та надання індивідуальних рекомендацій для їхнього подальшого професійного розвитку; визначено ключові переваги та виклики, пов'язані з використанням штучного інтелекту в оцінюванні професійної діяльності педагогічних працівників закладів загальної середньої освіти.

Висновки: використання штучного інтелекту суттєво підвищує об'єктивність, ефективність та прозорість оцінювання професійної діяльності педагогічних працівників закладів загальної середньої освіти, адже дає змогу перейти від кількісних критеріїв оцінювання до комплексного аналізу та сприяє формуванню індивідуальних траєкторій їхнього професійного зростання; успішне впровадження штучного інтелекту в оцінювання професійної діяльності педагогічних працівників базується на врахуванні єдиних методологічних підходів і стандартів, а також наявності відповідної технічної інфраструктури.

Ключові слова: *штучний інтелект, оцінювання, професійна діяльність, педагогічні працівники, об'єктивність, цифрові технології, персоналізація, стандарти оцінювання.*

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