Transformation of Higher Education in the Age of Artificial Intelligence: Analysis of Digital Learning Practices

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Abstract: The article analyzes the transformation of higher education in the era of Artificial Intelligence (AI) in the context of digital learning practices and cultural changes within the university environment. The aim of the study is to understand the impact of AI technologies on institutional models of universities and everyday learning practices. The methodological basis of the work is an interdisciplinary approach that combines cultural and pedagogical analysis with a comparative study of digital educational platforms. Special attention is paid to the role of AI as a tool for personalized learning, learning analytics, and the automation of educational and managerial processes, as well as to issues of ethics, autonomy, and cultural responsibility. The practical part of the article includes a comparative analysis of the distance learning systems Moodle and Google Classroom, using the case of the Odesa Polytechnic National University. It is shown that these platforms represent different models of organizing digital learning: a functionally oriented LMS with a high level of customization, and a cloud-based distance learning system focused on interface convenience and user experience. The results of the study confirm that the integration of AI into higher education is not only a technological but also a cultural process, which requires rethinking academic roles, educational strategies, and the value foundations of universities.

1 INTRODUCTION

1.1 Knowledge Transmission as a Cultural-Historical Phenomenon

Today our cultural heritage and access to information are being reinterpreted through digital archives and Artificial Intelligence (AI)-based analytics. Thanks to Natural Language Processing (NLP) technologies, machines can interact with human language, decode its meaning, and even generate language [1]. This means that today AI-based translation tools help us overcome language barriers, while voice assistants and chatbots make natural language interaction between humans and machines easier [2]. These technological achievements highlight the importance of language not only as a means of cultural communication but also as a way to preserve and ensure the accessibility of linguistic and cultural heritage. For example, AI-based tools can revive and preserve endangered languages [3]. In addition, digital archives and AI-driven analysis can make historical texts and cultural artifacts accessible and understandable to a wider audience of students. However, the inability of automatic speech recognition systems to adequately respond to

linguistic diversity may limit the quality of language input for multilingual students. This shows that AI is not only a tool created by human hands but also a natural extension of human intelligence, language, and culture [4]. From an analytical point of view, the given examples show the transformation of the function of language from a means of communication to a tool of algorithmic mediation. This makes it possible to consider AI as a mediator of cultural experience, influencing the structure of knowledge rather than only its transmission.

1.2 The Relationship Between Technologies and Education

Today screen technologies, mobile applications, social robots, and algorithmic interactions have become integral elements of the cognitive, sociocultural, and emotional development of modern students [5]. The users of such technologies are «digital natives» and «digital immigrants». These concepts were first introduced by Marc Prensky in 2001. According to his definition, digital natives are the generation that grew up in close contact with digital technologies from birth, for example, schoolchildren or students. Digital immigrants, on the other hand, are people who encountered digital technologies only at a certain stage of life and had to master them later, such as teachers. Digital natives tend to perceive information quickly, to take in to consideration polysemy, and learn through audiovisual materials, while digital immigrants prefer more linear and text-centered way of processing information.

It follows that even if we consider such elements of educational technology as theoretical foundations, human resources, methods and techniques, environment, goals, learners, learning situations, and assessment separately, it becomes clear how significant educational technology is for the practice of learning [6]. Liu and co-authors describe modern interaction between generative AI and education through four paradoxes. The first paradox is that AI is both a friend of the educational process and a source of potential danger. The second paradox is that AI is very talented but at the same time extremely dependent: its answers, recommendations, and ideas are limited by the sources available to it. The third paradox is that AI is both accessible to everyone and restricted for most. The fourth paradox is that even if this technology is banned, it will still remain attractive [7]. According to Coghlan, in order to deprive people of autonomy, maturity, and historical memory, no authoritarian leader (Big Brother) is needed. People themselves will worship technologies that take away their ability to think and put pressure on them [8]. Thus, it can be assumed that the effectiveness of digital learning directly depends on the consistency between students' cognitive styles and the digital tools used in the learning process.

2 LITERATURE REVIEW

The connection between AI and education goes much deeper than is usually assumed. The first work devoted to the application of AI in education dates back to 1954. In the 2000s, the number of studies in this field was only 173. In the 2010s, it reached thousands. The 2020s became a period of explosive growth: if in 2020 the number of studies exceeded 10,000, then by 2024 it surpassed 20,000. Thus, AI overcame very quickly its «formation period» and became one of the key actors both in the research and in the practical dimension of educational processes.

In 2023 according to UNESCO, AI is among the key technologies and applications that will shape the future of learning and teaching in higher education [9]. The literature highlights several advantages of using technological learning materials and computer support to improve learning efficiency, which can be grouped into the following directions:

- work with computer-mediated learning (web design, presentation, animation, sound, colour, simulation, use of visual and audio elements) [10];
- use of interactive boards, which provide teachers and students with a wide range of opportunities: they allow teachers to easily manage material, support different teaching styles, facilitate group classes online, and help students better understand abstract topics;
- creation of diverse learning environments, meeting needs related to individual differences, and increasing interest [11];
- provision of reliable observations, facilitation and enrichment of laboratory classes in institutions where materials for experiments are lacking [12];
- support for the immediate application of such learning principles as feedback, error correction, and reinforcement [13];
- giving learners the opportunity to determine their own learning time;
- multiple use of materials and simplification of information presentation [14];
- saving time.

Holmes concludes that student learning requires a transition from an environment where the basis was the book and learner autonomy to a complex and interactive environment that offers vivid sounds, video clips, symbols, and signs [15]. It should be noted that most of these studies were conducted with students, assistants, and teachers, and most importantly - with parents. Insufficient attention to parents, who play an important role in learning processes, may lead to the formation of negative attitudes among students towards the humanities, technical sciences, scientific thinking, and digital technologies [16].

The results of studies of this topic show that computer-mediated learning is most often considered as a more effective method compared to traditional approaches, which contributes to improving students' academic success [17]. It is noted in literature notes that the use of technologies in teaching the humanities, especially for students of technical specialties, increases learners' performance and motivation, and also supports long-term knowledge acquisition [18].

At the same time, in the review by Zhao et al., it is noted that AI has begun to integrate into teaching and learning processes, and three types of pedagogical applications are distinguished: feedback (16 studies), reasoning (10 studies), and adaptive learning (9 studies) [19]. A systematic literature review by Sadiku and co-authors identified four main functions of AI in online higher education: performance prediction, resource recommendations, automatic assessment, and improvement of the learning experience. Thus, information technologies are closely connected with the educational process.

3 METHODOLOGY

The research methodology is based on a combination of qualitative and quantitative approaches. Methods used include comparative analysis to contrast the functional and interface features of Moodle and Google Classroom; UX analysis to evaluate the usability of interfaces according to user behavior patterns; analysis of user sessions with the HotJar tool to record interactions with the system; and generalization and interpretation of empirical data to draw conclusions about the effectiveness of digital platforms. The comparison criteria for LMS were: navigation complexity (number of page transitions); time required to perform typical learning actions; number of clicks needed to achieve a target action; frequency of user difficulties; and the overall level of user experience (UX). The study analyzed a sample of users and their interaction sessions with the system, which made it possible to identify typical scenarios of platform use. In addition, two possible directions of educational transformation were highlighted: conservative and liberal, whose absolute guidelines in pedagogical practice are quite evident. During the analysis, the advantages and limitations of each were outlined.

3.1 Paternalism or Conservative Education and Libertarianism or Free Education

An educational concept can be formed through the expression of beliefs, principles, and broad strategies. For example, the main goal of education is to prepare for the economic success of the nation. Therefore, all students must acquire the skills necessary to work with information technologies. At the same time, society should not allow division. Social integration can be ensured by the fact that all students follow the same curriculum. Thus, a standard program must be adopted. Educational institutions should be responsible, and teachers should be controlling.

However, with a paternalistic understanding of education, society may face at least the problem of the «ideology of computer literacy», which Ahmad and Rahmat considered relevant [20]. Its main points can be summarized as follows: computers are everywhere; the need for computer skills in work is growing; therefore, everyone must study computer disciplines in the first years of university. Yet most employment forecasts indicate that only a small number of workers need to be specialists in the field of information technologies, and this minority should have higher education. The rest of the workers who use computers do not need skills beyond following instructions on the screen.

Libertarianism seeks to soften some consequences of postmodernism. Achieving this goal is possible only through the formation of an alternative view, for example:

1) The main goal of education is to prepare individuals who will become «smart clients». Information technologies will constitute the main market, managed by individuals. Therefore, they should be at the center of youth education;
2) In the future, individualism will dominate. Thus, imposing the same curriculum on everyone has lost relevance. Each student will follow a personal learning program, for example, elective courses based on computer

educational environments and virtual communities;

3) As a result, most learning will take place at home, that is, online. Nevertheless, some universities will continue to exist. They will be known as centers of lifelong education and will perform the function of safe provision of online learning.

Perelman, the author of «School's Out», believes that this means the approaching end of the educational empire. That is, if we want to know what will destroy the American academic empire in the next ten years, here are the key words: videotelephony, individual communication systems, virtuality, and so on. An example can be Hartley's observation, who argues that it is increasingly difficult for students to sit for 90 minutes, concentrating on a single source of information without the possibility of choice and control. However, the flow of media messages, which makes consumption and focus on oneself and the present moment attractive, may lead not so much to a «desire for autonomy» as to deep intellectual, sociocultural, and moral weakening.

At the same time, Neil Postman in his book «Amusing Ourselves to Death» notes that from Confucius to Plato, Cicero, Locke, and Dewey, philosophers of education emphasized that no one ever claimed or even suggested that education turned into entertainment ensured meaningful, effective, and sustainable success. Cultural integration is complex, as it requires overcoming obstacles.

3.2 Integration of AI-Supported Systems into Educational Activities

Especially after the COVID-19 pandemic and now war conditions in Ukraine, the acceleration of digitalization has encouraged universities to create more flexible, data-driven, and student-oriented structures. In this context, the integration of AI-supported systems into educational activities has become an inevitable necessity. For all participants - students, teachers, administrative staff, and researchers - AI offers functional solutions in such key areas as learning, assessment, research, and decision-making.

Adaptive learning systems analyze students' performance levels, learning speed, styles, and interests, turning educational processes into more effective, flexible, and student-centered ones. Unlike the classical «one program for all» approach, such systems take into account the cognitive and affective profile of each student and provide differentiated learning materials. This increases students' motivation and strengthens learning outcomes. Data obtained through AI-based systems, when analyzed within learning analytics, contribute to the development of learning materials, the identification of students' strengths and weaknesses, and the restructuring of general educational strategies. When processing student data, it is necessary to consider the principles of privacy, transparency, and student autonomy. Learning analytics should be structured not only to measure performance but also to support the holistic development of students.

Such approaches reduce the workload of teachers related to routine assessment and allow them to focus on more meaningful tasks, such as pedagogical planning, group interaction, and strategy development. Timeliness of feedback is also an important factor. Hasibuan and Azizah note that immediate feedback is effective in preventing incorrect learning [21], while Wang emphasizes its role in supporting self-regulation and internal motivation [22]. According to the self-determination theory of Veytia Bucheli and Gomez-Galan, such practices deepen the learning process by supporting students' sense of autonomy and competence [23]. For example, chatbots based on natural language processing provide round-the-clock support in administrative matters such as academic advising, registration, scheduling, and informing about exam dates. These systems reduce administrative workload while enriching the student experience through user-friendly approaches. They improve the quality of digital services and play an important role in combating digital inequality.

It should be noted that modern LMS integrate artificial intelligence tools, in particular: automated grading, student support chatbots, and/or recommendation systems for learning materials. For example, in Google Classroom the integration with Google AI allows tasks to be checked automatically, while Moodle supports AI plugins for learning activity analytics. Thus, the UX design of LMS should be considered in connection with the possibilities of AI integration. AI-based applications can analyze class attendance, assignment deadlines, exam results, and student behavior on online platforms, forming early warning systems. Such systems identify at-risk students, inform teachers, and provide personalized support. In addition, these data offer valuable feedback for updating learning design and improving assessment methods. In this context, the role of the teacher is transformed: he or she ceases to be only a transmitter of knowledge and becomes a mentor who stimulates social interaction and critical

thinking. AI takes over analytical and administrative processes, while educators focus on creating creative and cooperative learning environments in the digital space.

3.3 Analysis of the Interface of the Moodle Distance Learning System in Ukraine by Odesa Polytechnic National University Example

In Ukraine, the development of the distance learning system (DLS) started much later than in Western European countries and became popular during the Covid-19 pandemic and now in war conditions. The introduction of distance learning in Ukrainian educational institutions marked the beginning of raising the level of informatization of Ukrainian society and increasing the number of institutions equipped with computer technology. The Odesa Polytechnic National University, like most universities in the world, uses the most popular system Moodle as its DLS, which directly influences the quality of student learning. If a student does not have the opportunity to interact with the system, he or she loses motivation to use it as a tool for organizing self-education, which leads to lower academic performance and, accordingly, to a decrease in the relevance of studied disciplines for them.

It is appropriate to consider the interface of the Moodle DLS from the perspective of UX design. UX design is a broad field of knowledge that describes the feelings arising in users` interaction with a system. When designing digital products, three factors are considered: form, behavior, and content. Moodle DLS is a website that can be accessed from different places with Internet connection. The audience of this website is specific - students and teachers of the university. From the point of view of form and content, the useful component is considered first, that is, how many learning materials from each discipline will be placed, how the learning process will be organized (whether it will be a distance course consisting only of lecture notes and methodological support, or whether interactive and assessed elements such as practical tasks, testing, surveys, etc. will also be included). It can be concluded that the appearance of the website (form) is practically not considered as a factor influencing students' interaction with the system.

Moodle DLS has the ability to adapt and build on already prepared graphic solutions (themes). The Adaptable theme has been applied to the considered DLS. Although the appearance of the website is not a fundamental factor of analysis, Adaptable is a flexibly customizable adaptive two-column theme designed for use both in large university institutions and in small training companies. The DLS interface analysis to improve its quality for students should be conducted using data directly from the students themselves. There are enough tools that help track user behavior on a website. For this study, the HotJar service was used. HotJar is a behavior analytics service that helps Internet companies understand user behavior on a website. One of the popular tools of HotJar is the recording of user sessions on the site, which demonstrates their behavior (number of clicks, mouse movements, etc.). The analysis of student behavior on the site is usually conducted with different pages of the site: the main page, the course page, the test page. The data are video files, which are later analyzed manually. The study was conducted within one course that involved 128 users (students) and 742 sessions of interaction with the Moodle system. The data were collected using the HotJar tool, which records user behavior indicators such as the number of clicks, cursor movement, and navigation paths. The average session duration was 12.4 minutes (SD = 5.8), the average number of clicks was 18.7, and the average time to search for learning material was 34 seconds. In 41.6% of cases, students made repeated transitions between pages, which indicates navigation complexity. The obtained results allow Moodle to be interpreted as a platform with increased navigation difficulty and serve as an empirical basis for its comparison with alternative digital environments, particularly Google Classroom. Thus, students use the Moodle distance learning system differently, offered as a tool for organizing online learning. Nevertheless, not all students can use the system effectively and spend more time searching for information on the site. Therefore, Moodle DLS requires interface optimization, reduction of the number of links leading directly to course pages.

3.4 Analysis of the Google Classroom Interface on the Example of the Licensed Platform of the Odesa Polytechnic National University

Alongside the Moodle system, the Odesa Polytechnic National University also uses Google Classroom in its educational process, which performs the functions of a distance learning system (DLS). Google Classroom is a cloud-based educational platform integrated into the Google services ecosystem and operates on the basis of corporate accounts for teachers (@op.edu.ua), students (@stud.op.edu.ua), and postgraduates (@as.op.edu.ua). The use of corporate

email ensures centralized access, control, and protection of educational content, as well as the creation of a unified digital educational space of the university. From a regulatory perspective, Google Classroom can be classified as a DLS, since it provides the organization of the learning process, communication between participants, distribution of learning materials, and monitoring of task completion in an online environment. Unlike Moodle, which is a classical Learning Management System (LMS) with wide customization and functional expansion options, Google Classroom is oriented toward a simplified model of managing the learning process, focusing on quick interaction, transparent course structure, and intuitive navigation.

The Google Classroom interface was initially designed with UX principles and mass users in mind. The course structure is built according to the logic of the "Stream", as well as the tabs "Assignments", "People" and "Grades", which reduces the cognitive load on the user and minimizes the number of navigation actions needed to find learning materials. Unlike Moodle, where the depth of page nesting and the number of transitions can complicate orientation, Google Classroom offers a more linear and visually clear interaction model with fewer transitions between interface elements.

A particularly important factor for the effective use of Google Classroom in the university environment is the previous user experience of students. Most learners have already encountered this system at the level of general secondary education, which forms basic digital skills in working with the interface, assignments, and comments. Thus, the adaptation period for students is minimal, and the platform itself is perceived as a familiar tool for organizing learning. This positively influences motivation, engagement, and regularity in completing academic tasks.

Another important functional element of Google Classroom is the grading system, which is oriented toward flexible management of learning outcomes and step-by-step informing of students. The platform allows teachers to preliminarily assign grades for unsubmitted or unassessed tasks. These grades are stored in the internal system and are not displayed to students until their official publication, which makes it possible to adjust results, consider additional attempts or retakes, and build more individualized model of knowledge control.

Google Classroom also includes a built-in grade calculator that automatically calculates the final result for a distance course based on completed tasks. The teacher can choose a grading system, for example, points, percentages, letters, etc., and also decide whether the final grade will be displayed to students during the learning process or only after the course is completed. This approach allows the grading system to be adapted to the requirements of a specific discipline and educational program.

Among other significant features of Google Classroom, it is worth noting its deep integration with Google Workspace services (Google Docs, Slides, Sheets, Drive, Meet). This makes it possible to organize collective and individual work in real time, automate the process of submitting assignments, and minimize technical barriers during the review of student work. All changes in documents are recorded by the system, which facilitates the control of academic integrity and tracking of each student's contribution. At the same time, the functionality of comments and private messages ensures asynchronous communication between teachers and students, including the possibility of leaving private remarks on specific tasks. This strengthens feedback and supports the personalization of the educational process. In addition, the system supports automatic notifications that inform students about new assignments, deadlines, and published grades. Compared to Moodle, which recorded a higher average number of clicks and navigation transitions, the interface of Google Classroom requires fewer navigation actions and offers a more linear structure of interaction.

4 RESULTS AND DISCUSSION

4.1 Comparative Analysis of the Use of Moodle and Google Classroom in the University Educational System

The practical analysis of LMS is considered as an example of implementing digital educational environments in which artificial intelligence technologies are potentially integrated. It should be noted that detailed quantitative behavioral data were available only for the Moodle platform. The analysis of Google Classroom was carried out on the basis of structural and functional comparison of interfaces, as well as indirect UX indicators (in particular, the number of navigation actions, the logic of the interface, and the previous user experience of students). When comparing the use of Moodle and Google Classroom, it is appropriate to speak about two types of distance learning systems (DLS) applied in the university:

1) A functionally rich LMS (Moodle), oriented toward comprehensive management of educational courses, detailed analytics, and multi-level knowledge control;
2) A simplified cloud-based DLS (Google Classroom), focused on quick communication, fast organization of the learning process, and ease of use.

From a practical point of view, Google Classroom is perceived as a system that is easier to master, mainly due to its familiar interface and students' previous school experience. This is reflected in the reduction of navigation actions and the shorter time needed to access learning materials compared to Moodle. At the same time, Moodle retains its importance as a universal platform for implementing complex distance courses. The results of the comparative analysis of Moodle and Google Classroom in the university educational system are presented in Table 1.

According to the observations, 65% of students prefer Google Classroom, while 35% use Moodle only when necessary. At the same time, the parallel use of two distance learning systems allows the Odesa Polytechnic National University to flexibly adapt to different educational tasks, combining the functional depth of Moodle with the user accessibility of Google Classroom. It should be noted that Google Classroom, together with its intuitive interface and students' previous user experience, is an effective and methodologically appropriate tool of distance learning in university practice, especially during the period of war.

To summarize the results of the comparative analysis, a radial diagram (Fig. 1) was used, which reflects qualitative evaluations of the platforms. This is a visual analytical tool that shows the relative advantages and limitations of Moodle and Google Classroom according to key UX and didactic criteria. The values of the indicators serve to synthesize qualitative observations obtained during the analysis of the interface and user experience, reflecting relative differences between the platforms. They are intended to generalize qualitative conclusions and are not aimed at providing quantitative measurement.

Table 1: Analytical and criteria-based comparison of the Moodle and Google Classroom distance learning systems.

Analytical Criterion	Moodle	Google Classroom
Type of Platform	Functionally rich open-source LMS	Cloud-based DLS
Educational Paradigm	Management of complex, structured courses	Operational organization of the learning process
Interface Architecture	Hierarchical, multi-level structure	Linear, stream-like structure
UX Design	A higher average number of page transitions (several levels of nesting)	A lower average number of transitions (limited number of transitions)
AI integration	Limited (through plugins)	Embedded (Google AI ecosystem)
Cost of Use and Integration with Other Services	Free of charge, but requires expenses for server and administration	Free of charge as part of Google Workspace for Education
Scalability	Suitable for large universities	Better suited for individual courses
Adaptation to Students' User Experience	Many features, but a higher level of navigation complexity; requires additional training and adaptation	Lower level of navigation complexity, based on previous school experience
Convenience for Teachers	Needs training for effective use	Intuitively easy to use
Organization of Learning Materials	Flexible, but difficult to perceive	Unified and transparent
Assessment System	Multi-level, with extensive customization options	Automated, with preliminary calculation of results
Learning Activity Analytics	Implemented through external tools	Built-in mechanisms for activity and deadlines
Functionality	Very broad: courses, tests, forums, analytics, plugins	Limited, but sufficient for basic learning
Typical Use Scenarios	Complex distance courses with multi-level control	Current organization of learning and communication
Preliminary Assessment	Limited or implemented through plugins	Built-in function of preliminary assessment
Main Limitations	Overloaded interface, complicated navigation	Limited advanced LMS functions

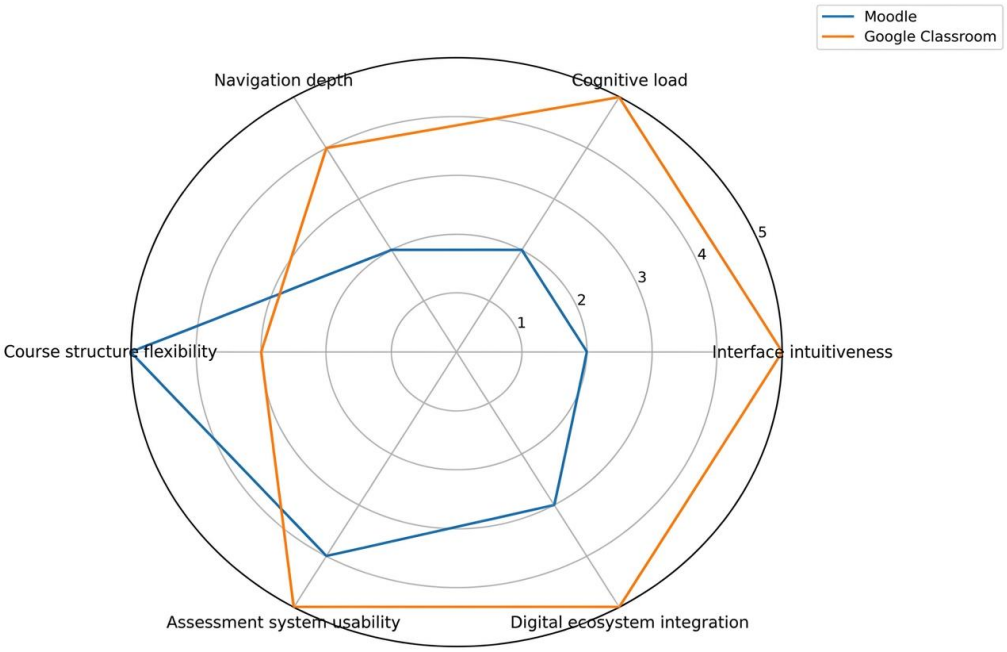

Figure 1: Radial diagram of comparative UX and functional characteristics of Moodle and Google Classroom.

4.2 Recommendations for the Implementation of AI in Higher Education

For the effective integration of AI into the higher education system, it is extremely important to introduce comprehensive training programs and internships for teachers aimed at developing their AI literacy. For example, the International Internship «Digital Future: Blended Learning» DigIn.Net2. Such programs should provide knowledge and skills related to the use of AI tools in a pedagogical context. Including courses on the topic «Artificial Intelligence and Education» in the curricula of teacher training institutes may help increase the awareness of future educators about the application of AI in the educational sphere. For example, this may include the creation of AI workshops as well as a university center for digital competences.

5 CONCLUSIONS

The conducted study was aimed at understanding the transformation of higher education in the era of AI in the context of digital learning practices, cultural changes, and institutional transformations of the university environment. Based on interdisciplinary analysis, it was shown that the introduction of AI into the educational sphere cannot be considered only as a technological update but requires a conceptual and value-based rethinking of the goals and functions of education.

The paternalistic model presented in the article emphasizes the role of standardization, control, and institutional leadership in preparing specialists for the information economy but carries the risk of reducing the educational process to the instrumental acquisition of technologies. In contrast, the libertarian approach highlights the individualization and autonomy of learning but underestimates the social-integrative function of education and may contribute to the fragmentation of cultural and intellectual space. Therefore, there is a need to search for a balanced model in which technological innovations are combined with the cultural and ethical foundations of education.

It has been shown that AI performs the functions of a tool for personalized learning, automated assessment, analytical support for decision-making, and the development of student services. At the same time, it is emphasized that the effectiveness of these processes directly depends on the level of digital and AI competence of teachers, as well as on the institutional readiness of universities for cultural change. Therefore, attention should be paid to preparing teachers for the correct and appropriate use of technological learning materials in the educational environment.

The comparative analysis of Moodle and Google Classroom revealed that these platforms represent two different approaches to organizing distance learning and showed that the complexity of Moodle's interface and navigation may reduce students' motivation and the effectiveness of self-learning, while Google Classroom, thanks to its intuitive UX design and students' previous user experience, promotes greater engagement and regularity of learning activity. The results show the need to consider not only the functional characteristics of the platforms but also the cultural, cognitive, and behavioral features of users in the process of optimizing digital educational environments. The UX analysis data open up opportunities for improving the integration of AI into LMS, particularly in the context of learning personalization and interaction automation. In the war conditions in Ukraine, the hybrid use of different DLS has become a stable educational strategy. The study has certain limitations. First, quantitative UX data were collected only for Moodle, while the analysis of Google Classroom is partly based on qualitative comparison. Second, the sample is limited to one course and one higher education institution, which may affect the generalizability of the results.

In conclusion, it has been emphasized that AI in education is not an end, but a tool whose effectiveness is determined by the presence of a clear philosophical position, ethical guidelines, and a well-thought-out pedagogical strategy. The prospects for further research are connected with a deeper analysis of the interaction between AI, UX design of educational platforms, and the digital culture of universities, as well as with empirical studies of the impact of AI-supported systems on students' academic performance, motivation, and cultural socialization. It should be remembered that AI is not a goal, but a tool for improving learning and management processes. The correct use of this tool is our shared responsibility.

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