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## Digital educational platforms as a teaching resource for future language teachers

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**Abstract.** Research into the integration of digital educational platforms into the teaching process at teacher training universities, particularly into the practical activities of students, is an important stage in the digital transformation of higher and secondary education. The aim of the research was to determine the effectiveness of using various types of modern educational platforms in the theoretical and practical training of students majoring in teaching. The effectiveness of integrating digital educational platforms into the training of philology students was tested through descriptive and predictive analysis. The preparatory work for the practical activities of future teachers was to determine the types of educational digital platforms according to the purpose and functions (management, educational, gaming, communication and analytical), as well as innovative characteristics (feedback, artificial intelligence, etc.). The proposed colour indexing of digital educational platforms served as an auxiliary tool for defining the functional capabilities. The results of the work showed that students and teachers are generally familiar with digital resources and understand the advantages and disadvantages. The ratings on a five-point scale of educational platforms and the educational capabilities differed significantly among respondents – student interns, school teachers, and secondary school students. Teachers and interns rated electronic management platforms and educational content 1.5 points higher than students. However, the use of interactive forms of learning, communication opportunities, and artificial intelligence was rated 2-2.5 points higher than teachers' assessments. The study's results showed that the introduction of digital educational platforms contributes to the professional training of students and helps secondary school teachers become aware of the students' learning expectations regarding digital resources

**Keywords:** competence formation; integration; professional training; interactive technologies; instructional activity; curricular convergence; management platforms

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## INTRODUCTION

Global digitalisation is defining a new stage in the development of cyber technologies, driven by the powerful combined forces of information, management, and communication. For the digital transformation of education, it

is important to use high-quality digital technologies and develop infrastructure, in particular online services, which depend on free choice and are regulated by cybersecurity principles regarding disinformation and information



manipulation. One of the priority tasks of digitalisation is the ability to work with digital technologies, which are gradually becoming a permanent and necessary resource for most specialisations, i.e. cross-platform or cross-functional. The training of future teachers requires a focus on the digitalisation of the educational process in modern educational institutions: student access to modern technologies (Student Accessibility), mastery of modern educational technologies and teaching methods (Teacher Accessibility), introduction of digital learning tools in the management and document flow of educational institutions (Administration Accessibility), integration of educational Internet programmes into the learning process (Fibre-to-the-Building and Wi-Fi).

Ukrainian researchers have examined the general principles of the digitisation of education and specific aspects of the use of digital platforms. V. Bykov (2022) specified the process of digital transformation, emphasising the importance of maintaining consistent learning motivation at all stages; ensuring prompt feedback to each student; ensuring that learning activities are project-based with the deepest possible integration of theoretical and practical learning; significantly reducing the time required to develop and implement educational programmes; and increasing the openness and transparency of the education system. A. Zelinska *et al.* (2023) analysed the content of the concept of digital competence, comparing the parameters of information competence and digital literacy. According to researchers O. Liashenko *et al.* (2024), the strategic priorities for the digitalisation of the educational environment of educational institutions depend on the development of digital educational infrastructure by improving the efficiency of online educational platforms and their tools. According to the researchers, the productivity of web platforms, specialised software, and free video conferencing services is ensured by attracting investments for the development and support of educational online platforms and specialised training programmes, as well as partnerships with government agencies and IT companies to create new tools and platforms for distance and blended learning. Scientists are focusing on the problems of terminology in the digital educational thesaurus.

Yu.Y. Tulashvili (2021) focused on strategies for implementing pedagogical technologies using electronic learning systems, multimedia technologies, and virtual reality technologies. The scientist noted the absence of perfect mechanisms that would allow constructively determining the level of informatisation of an educational institution, recording the quality of information provision, and making correct decisions regarding directions of development in the context of the digitalisation of society. Research conducted by scientists over the past two years shows significant progress in the development of specific ways to improve the computerisation of educational institutions, in particular, the use of digital platforms in the educational process. Scientists are focusing on issues related to the training of teachers to work in a digital society. In a study

by M. Zinchenko *et al.* (2022) criteria for evaluating the functionality of e-learning platforms were identified and a comparative analysis of the functionality of e-learning platforms and components was conducted, which helped to identify only three Ukrainian e-learning platforms that meet the criteria, but these platforms are commercial products. The problem of using digital platforms in educational institutions is viewed differently by foreign scientists, as most countries have previously switched to centralised management of the educational process. The problems of using open educational resources (OER) remain relevant for research. According to P. Harvey & J. Bond (2022), there is a need for further evidence that OER improves teaching and learning before recommending a complete transition from traditional forms of educational programmes to an exclusively open resource structure. A.M. Mullens & B. Hoffman (2023) noted incentives such as cost savings, accessibility, and increased academic engagement, while also acknowledging technological and institutional barriers. S. Mishra (2025) analytical review highlighted specific aspects of accessibility, enabling factors, barriers and challenges, equity and diversity, and legal and technical openness in the use of OER.

Thus, there is currently a fairly solid research base on the use of educational platforms in various educational spaces – secondary and higher education. This study aimed to integrate these educational resources into the practical activities of future teachers. In the first stage of the study, attention was focused on analysing modern online learning platforms, determining their functional capabilities and level of compliance with modern requirements for teaching secondary and higher education students. A large number of online platforms had to be systematised according to the information and technological characteristics, purpose and specific educational functions. The aim of the study was to justify the need to include in the theoretical and practical training programmes for students of pedagogical specialties a content module on mastering modern educational platforms of various functional purposes in the form of lectures, practical tasks with education management platforms, as well as during educational and industrial internships.

## MATERIALS AND METHODS

The theoretical basis of the study was formed on the basis of recommendations from Ukrainian documents on the digitisation of the educational process (The project of digital agenda of Ukraine 2020, 2016; State Service for Quality Education of Ukraine, 2022) as well as research in the fields of learning theory, philosophy of education, computer science, philology, etc. The combination of these disciplines allowed for a comprehensive approach to solving educational problems related to the development of digital competence in philology students during studies and internships. Descriptive analysis allowed to examine the results of a survey related to the use and mastery of educational platforms designed to optimise the educational process and document flow in educational institutions, as well as to ensure and

modernise the educational process. To determine the effectiveness of the use of digital educational resources, taking into account the influence of significant factors, predictive analysis was chosen to develop a comprehensive analytical approach to the training of future philology teachers.

The educational relevance of digital educational platforms was assessed using a Likert scale with the following options: disagree, somewhat disagree, somewhere in the middle, somewhat agree, agree, and the survey methodology of J.W. Creswell & J.D. Creswell (2022). The survey method allowed to collect data from a large sample, as students at the pedagogical university undergo both practical training (without teaching subjects) and industrial training (with classroom lessons) at the same time. The use of colours helped to distinguish questions according to the selected typology of educational platforms: yellow – centralised learning management platforms; green – educational content platforms; red – communication functions, such as news, chats, feedback via gadgets, artificial intelligence, etc.; analytics of the learning process is marked in blue. A total of 54 third- and fourth-year students from the Educational and Scientific Institute of Foreign Languages at V.G. Korolenko Poltava National Pedagogical University participated in the survey. Korolenko, specialising in: 014.02 Secondary Education (Language and Foreign Literature (English) and Language and Foreign Literature (German)); 014.02 Secondary Education (Language and Foreign Literature (German) and Language and Literature (English)). The survey was conducted during the 2024-2025 academic year. The sample of students was selected according to the size of the academic group, excluding those students who study according to an individual schedule. The ratio of female to male students was 1:5 (9 boys and 45 girls). The average age of the teachers of the Department of English and German Philology who participated in the assessment at the time of the experiment was 46 years. The average age of English and foreign literature teachers at the schools where the students did the internships was 53 years.

The questionnaires, which served as the main tool of the experiment, were developed taking into account the organisation of theoretical and practical training. The questionnaire was conducted under conditions of anonymity, voluntariness and ethics (American Psychological Association, 2017; Code of Academic Integrity..., 2022). For students, part of the questionnaire was tested in a course on language and literature teaching methods. Student interns evaluated the responses of students and teachers, which amounted to 160 respondents, of whom 14% were teachers of foreign languages and foreign literature and 86% were students. The survey results were compared as weighted average scores characterising digital platforms according to criteria of management and organisation of the educational process, communication and analytics. The survey of secondary school students, teachers and university lecturers was part of the practical training of philology students. At the same time, interns were among the respondents, as during the industrial practice they mastered the system of

educational platforms, in particular those chosen by the school for joint management and educational work.

The relevance of developing digital competence among teachers in educational institutions is closely linked to the reform of the education system in Ukraine, as well as the expansion of distance learning. Digital innovations include digital learning management systems (platforms), virtual and augmented reality, digital assessment systems, mobile technologies and gamification, among others. In the conceptual and reference database, the digital competence of teachers and researchers is defined as a dynamic combination of knowledge, skills and abilities in the field of digital technologies, which forms the ability to effectively perform professional activities using educational platforms for organisational, business, educational and communication purposes (Conceptual and reference framework..., 2021). This term refers to the responsible, critical use of digital technologies for learning, working and participating in public life. Digital competence includes computer and information literacy, communication, collaboration, digital content creation, cybersecurity (Spirin, 2021) and lifelong learning in a digital society (Marienko & Sukhikh, 2022). Preparatory work by students and teachers preceded the survey to familiarise themselves with educational platforms. Modules on the topic of “Digital educational platforms in school practice” were developed for the courses “Methods of Teaching Foreign Languages” and “Methods of Teaching Foreign Literature”. The processes of transformation and digitalisation of education have led to an increase in the number of educational platforms with different focuses, goals and content. Studies by M. Ouadoud *et al.* (2016) served as the basis for developing criteria for evaluating the functionality of e-learning platforms. Students’ attention was focused on educational portals selected by the educational institution, which contained the class schedule for the entire school, an electronic journal and electronic diaries, allowing the entire educational process to be integrated within the school, region and country.

To support the educational process, other educational platforms selected by teachers and students were integrated into the main school management platform. These platforms contain methodological content, including lesson planners, tools for assessing student knowledge, and accessible interactive methods and techniques. Communication between students was also facilitated through chats, blogs, and video conferences, both on the school management platform and on special educational resources. Analytical work was programmed as both individual and collective analysis of learning outcomes, as well as reflection by students and parents on these outcomes. The use of artificial intelligence increases the number of users of educational websites, as interactive generators of drawings, presentations, and maps are used as lesson content and a means of communication. The novelty of such platforms and their unpredictability attract the attention of a large number of students and pupils. A platform with these characteristics

must perform four basic functions: communication, information exchange, access to information, and collaboration. These functionalities characterise both pedagogical and technological approaches. When compiling questions for the questionnaire, the listed functions and characteristics

of digital educational platforms were taken into account. The questionnaire for teachers, pupils and students contained eight questions, five of which required assessment on a five-point scale, and three of which required answers to questions about educational platforms (Table 1).

**Table 1.** Questionnaire for evaluating digital educational management programs used by the educational institution

| №  | Question or task   | Characteristics and evaluation |         |         |
|----|--|--------------------------------|---------|---------|
|    |  | Student teacher                | Teacher | Student |
| 1. | Name the educational platforms you know and have used  |                                |         |         |
| 2. | Rate the organisational functions of your institution's management platform on a scale of 1 to 5:<br><ul style="list-style-type: none"> <li>• schedule;</li> <li>• journal;</li> <li>• diary</li> </ul>  |                                |         |         |
| 3. | Name the subjects (disciplines) for which you use educational platforms to prepare.  |                                |         |         |
| 4. | In which lessons (classes) are the capabilities of educational digital platforms used most?  |                                |         |         |
| 5. | Rate the learning opportunities offered by digital platforms:<br><ul style="list-style-type: none"> <li>• online lessons;</li> <li>• video materials;</li> <li>• testing;</li> <li>• homework</li> </ul> |                                |         |         |
| 6. | Rate the interactive forms of work on educational platforms:<br><ul style="list-style-type: none"> <li>• games;</li> <li>• audio materials;</li> <li>• videos;</li> <li>• quests</li> </ul>              |                                |         |         |
| 7. | Assess the communication functions of educational platforms:<br><ul style="list-style-type: none"> <li>• news;</li> <li>• chats;</li> <li>• feedback;</li> <li>• artificial intelligence</li> </ul>      |                                |         |         |
| 8. | The importance of knowledge quality control and learning outcome analysis:<br><ul style="list-style-type: none"> <li>• progress reports;</li> <li>• ratings;</li> <li>• reflection</li> </ul>            |                                |         |         |

**Note:** educational platforms were coded by questions in different colors: yellow – organisational; green – academic; red – communicative; blue – analytical

**Source:** developed by the authors

Colours and icons were used to indicate the types of educational platforms and their content: yellow colour – learning management platforms that contain class schedules, electronic journals, student diaries and school documentation; green indicates platforms focused on supporting the learning process: lesson plans, video lessons, homework systems, assignments and tests to check students' knowledge and skills. The educational content also included interactive tools: games, projects, audio and video materials. Red indicates communication features built into digital education platforms, such as news, chats, feedback via gadgets and artificial intelligence. Learning analytics, marked in blue, is an additional feature of all previous types of educational platforms. The survey was conducted in two stages: the first stage assessed the actual use of educational resources by educational institutions to manage the

learning process, and the second stage modelled the predicted situation of digitalisation of academic institutions based on the monitoring results. Students evaluated the demonstration of educational software and its potential in terms of the functions, purpose and technical capabilities of educational platforms. Students and teachers were asked to add new resources and additional platform features to the table. This work had a dual purpose: to prepare students to work with educational digital resources and, at the same time, to independently conduct a survey among the participants in the educational process with whom they would be doing the internship. The internship supervisor analysed the results of the survey of student interns, and the students counted the responses of pupils and teachers. Student project work, as specified in the working programmes on foreign language and foreign literature teaching methods, included



















research conducted by students to master various types of platforms, as well as further characterisation and presentation of the resource's capabilities and finished products.

## RESULTS AND DISCUSSION

The process of developing students' digital literacy by evaluating educational platforms has been implemented at Poltava National Pedagogical University for the third academic year in a row. Previously, this work was sporadic and focused on mastering innovative teaching methods

in courses on methodology and disciplines chosen by students in accordance with the methodological orientation. A comprehensive analysis of educational platforms by students during the internship demonstrated significantly better learning outcomes, as well as thorough independent work and a creative approach to presenting the survey results. One of the results of the work was the classification of educational platforms. Table 2 was developed during practical classes on student project tasks on the principles of classification and content of educational platforms.

**Table 1.** Types and components of educational digital platforms

|                         |  |   |  |  |
|-------------------------|--|---|--|--|
| <b>1. Management</b>    | Schedule<br>            | Electronic journal<br> | Diary<br>             | Documentation<br> |
| <b>2. Learning</b>      | Lesson plans<br>        | Online lessons<br>     | Homework<br>          | Testing<br>       |
| <b>3. Games</b>         | Games<br>               | Audio materials<br>    | Video<br>             | Projects<br>      |
| <b>4. Communication</b> | News<br>              | Chats<br>            | Feedback<br>        | ChatGPT<br>     |
| <b>5. Analytical</b>    | Learning outcomes<br> | Reflection<br>       | Student ratings<br> |  |

**Note:** educational platforms were coded by questions in different colors: yellow – organisational; green – academic; red – communicative; blue – analytical

**Source:** developed by the authors

Management and learning platforms are accompanied by learning outcomes, performance assessments, and reflection on learning content or educational services. A. Bozkurt & R.C. Sharma (2022) emphasised the importance of learning analytics as it provides insight into and optimisation of learning and the environments in which it takes place. The division into types of educational programmes was rather arbitrary, as platform developers sought to integrate learning materials with interactive communication and learning outcome analysis. Analytical data indicate active use of educational resources, particularly during the pandemic and martial law. The annual report for 2022-2023 State Service for Quality Education of Ukraine (2022) indicated that 76% of secondary education institutions use education management platforms, which allows personalised access to distance learning for all participants in the educational process. It would like to highlight the websites that lead the rankings in Ukraine in terms of the number of users during the 2023-2024 academic years: the website "New Knowledge" covers 55% of schools in Ukraine, "My School" – 6%, "NIT: Education and Technology" – 5%,

"Electronic Journal" – 4%, and others: HUMAN, "Electronic Schools", "Smart School", "All Education", "Unified School", "School Today", etc. (State Service for Quality Education of Ukraine (2022)). According to the results of the previous academic year, Google Classroom (73%), Google Workspace for Education (16%), other tools or proprietary platforms (40%) are predominantly used during the learning process. For example, the Lviv City Council uses the Learning and Technology educational platform, while most institutions in Kyiv use Single School. Schools in Poltava use educational websites to organise the learning process, with New Knowledge being the most widely used (85%), followed by My School (9%) and OIS Eddy (6%). The results of research conducted by students with the aim of mastering various types of platforms, followed by a presentation of the resource's capabilities and finished products, were evaluated as individual project work included in the working programmes on foreign language and foreign literature teaching methods. A summary of the results of student research is presented in Table 3, which includes the name of the platform, content and colour coding.

Table 1. Analysis of digital educational resources







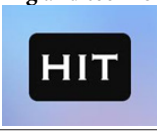



























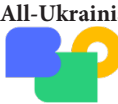















| №   | Name   | Content  | Type  |
|-----|--|--|---|
| 1.  | <b>New Knowledge</b><br><br>NZ.UA           | Information and communication platform for centralised management of educational institutions. Electronic document management.<br>Educational resources: lesson creation, distance learning.<br>Feedback and communication.<br>Analysis of student, class, and school performance. |    |
| 2.  | <b>Vseosvita</b><br><br>ВСЕОСВИТА           | National information and communication education platform.<br>Educational resources: test builder, methodological bank of lessons, tasks, multimedia, and interactive materials. Testing. Olympiads, competitions for teachers, and students.                                      |    |
| 3.  | <b>My School</b><br><br>Моя Школа           | A platform for centralised management of educational institutions. Electronic document management.<br>Educational resources: functionalities for stationary and distance learning.<br>Unified internal communication network.  |    |
| 4.  | <b>Learning and technologies</b><br><br>HIT | Centralised institution management platform. Electronic document management.<br>Educational resources: online lessons, audio communication, chats, and access to electronic learning materials.<br>Calendar of events and announcements. Performance monitoring.                   |    |
| 5.  | <b>HUMAN School</b><br><br>HUMAN          | Information and communication platform for centralised school management.<br>Electronic document management.<br>Educational resources: remote online lessons, feedback. Attendance reports, performance analytics, and reflection.   |   |
| 6.  | <b>Single School</b><br><br>Єдина Школа   | Information and communication automated system for educational institutions.<br>Electronic document management.<br>Educational resources: remote online lessons.<br>Feedback and communication.<br>Performance statistics  |  |
| 7.  | <b>OIS Eddy</b><br><br>eddy               | Centralised school management platform. Electronic document management.<br>Educational resources: tools for distance and blended learning, creation of online courses, and custom online lesson module.  |  |
| 8.  | <b>E-schools</b><br><br>school            | Information and Communication Automated System for Educational Institutions. Electronic document management.<br>Educational resources: remote online lessons, homework checking.<br>Feedback and communication.  |  |
| 9.  | <b>Atoms</b><br><br>atoms                 | Centralised institution management platform.<br>Educational resources: lesson plans, teaching materials, methodological guidelines.<br>Distance learning courses: webinars, training courses, and lectures.  |  |
| 10. | <b>Smart School</b><br><br>SMART-SCHOOL   | Centralised school management platform. Electronic document management,<br>Educational resources: Distance learning, testing.<br>Progress reports and statistics.  |  |
| 11. | <b>School Today</b><br><br>SchoolToday    | Centralised school management platform. Electronic document management.<br>Educational resources: access to teaching materials, testing. Independent monitoring of homework completion.  |  |
| 12. | <b>Prosvita</b><br><br>PROSVITA           | Centralised school management platform. Electronic document management.<br>Educational resources: a bank of educational materials, online lessons, and homework assignments.<br>Analysis of student achievement.   |  |

Table 3. Continued

| №   | Name   | Content   | Type  |
|-----|--|---|---|
| 13. |  <b>Classtime</b><br><b>На Урок</b><br>освітній проєкт            | Ukrainian digital educational ecosystem.<br>Educational resources: interactive lessons, tests. Learning outcome analytics.<br>Online chat.<br>Webinars, online conferences, master classes. | <br><br> |
| 14. |  <b>Google Classroom</b>  | Google web service for educational institutions. Class formation.<br>Creation and checking of assignments, feedback.<br>Educational resources: creation of tests and presentations.         | <br>  |
| 15. |  <b>MOODLE</b><br><b>moodle</b>                                   | Online learning platform. Class formation.<br>Educational resources: accumulation of learning materials in various formats (text, presentation, video material, web page); test creation.   | <br>  |
| 16. |  <b>All-Ukrainian Schoolonline</b><br>ВСЕУКРАЇНЬСЬКА ШКОЛА ОНЛАЙН | Educational platform for distance and blended learning.<br>Educational resources: video lessons, tests, materials for independent work in 18 core subjects.                                 | <br><br> |
| 17. |  <b>Liveworksheets</b>  | Website with interactive tasks.<br>Educational resources: a bank of exercises and tasks. Interactive workbooks for self-assessment.   | <br>  |
| 18. |  <b>Kahoot!</b>  | Ramified online learning platform.<br>Educational resources: various types of tests.  | <br>   |
| 19. |  <b>Padlet</b>  | Multimedia platform.<br>Educational resources: creation, editing, and storage of information on a virtual wall (photos, files, links, notes).   | <br>  |
| 20. |  <b>Canva</b>   | Online graphic design platform.<br>Educational resources: (graphs, presentations, websites).  | <br>  |

**Note:** educational platforms were coded by questions in different colors: yellow – organisational; green – academic; red – communicative; blue – analytical

**Source:** developed by the authors

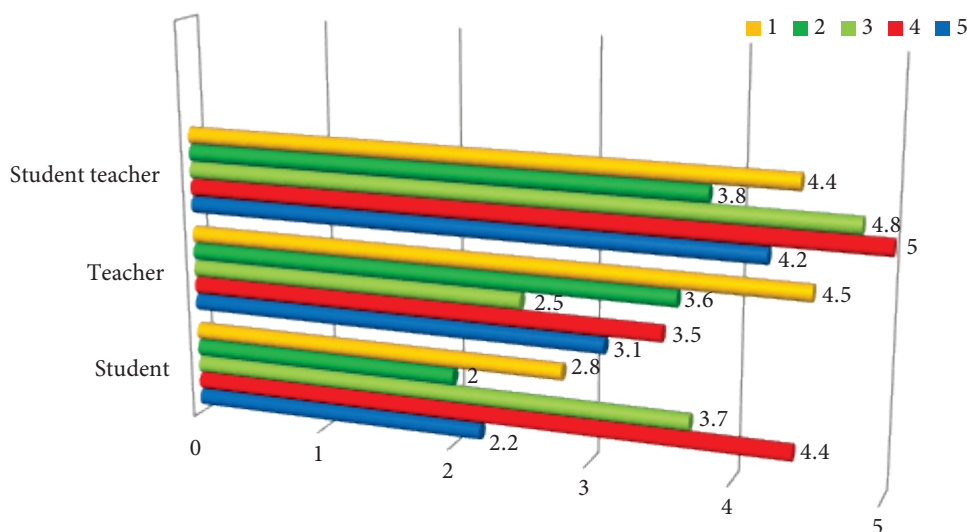
General knowledge about the types of educational platforms and understanding of the principles of keeping electronic journals and diaries enabled students to prepare for active practice in educational institutions and participate in the organisation and conduct of the survey. The students' activities in educational institutions allowed them to analyse the work of teachers and students with educational platforms and identify priorities for work, as well as identify shortcomings in working with electronic organisational resources, which are new to participants in the educational process and require new knowledge and skills. The questionnaires were developed and analysed with the help of methodologists both during preparation and during practice. Auxiliary table No. 2 were compiled by students in the course of studying the disciplines "Methods of Teaching Foreign Languages" (4 credits) and "Methods of Teaching Foreign Literature" (4 credits), as well as during preparation for the practice. The results showed that 100% of respondents were familiar with the principles of operation and had used educational platforms over the past three years. When

studying English, history, and computer science, students most often turned to educational platforms for support. The overall picture of the monitoring can be seen in the Figure 1, which shows the priorities of participants in the educational process.

The ratings of electronic organisational functions (journals, diaries) differ significantly: while teachers and students (4.5 and 4.4, respectively) consider them to be a real help in learning, students rate them only 2.8, explaining this by increased control over attendance and awareness on the part of parents. A similar situation can be observed with the learning opportunities offered by educational platforms, which are rated higher by teachers and students (3.6 and 3.8) than by school students (2). It is clear that these functions are designed for professional activities and are more necessary for teachers and student interns who do not have work experience. Responses to questions 7 and 8 regarding the use of interactive forms of learning, communication opportunities, and artificial intelligence showed that university students (4.8; 5) and school students

(3.7; 4.4) want to see more multimedia platforms, visual applications, and artificial intelligence capabilities in the

educational process, while teachers tend to give more moderate ratings (2.5 and 3.5).



**Figure 1.** Results of the survey of digital educational platforms

**Note:** educational platforms were coded by questions in different colors: yellow – organisational; green – academic; red – communicative; blue – analytical

**Source:** developed by the authors

The analytical functions of educational websites are rated by respondents in the same manner as the organisational and educational tasks of educational digitisation. Teachers and students are increasingly aware of the possibilities that statistics offer in assessing academic performance, attendance, and other activities of individual students, classes, and the entire school. In addition, they gain a better understanding of the importance of generalised results for improving the teaching and educational processes. The survey revealed that teachers prefer the following educational platforms for their teaching work: Na Urok, Vseosvita, Vseukrainska Shkola Online, Canva, Kahoot, Classtime, Edpuzzle, TED, as well as social networks (Facebook, Instagram, Learning.ua), and blogs (online journals, event diaries). Students noted Google Classroom and Moodle as the systems they used most often in the teaching practice, as well as those platforms they became familiar with during the training in teaching methods and industrial practices: Udemy, Gamma, Trello, Powtoon, Pear Deck Learning, Quizlet, Prezi, Quizizz, JustClass, Canva, Perfect Party & Event, Nearpod, LearningApps, etc. Students from well-known educational programs noted Na Urok, Kahoot, DALL-E. As the survey results show, teachers named the most important functions of educational platforms as the ability to organise students and expand educational functions through methodological support and effective knowledge testing, as well as feedback opportunities. The lowest ratings were given to the use of multimedia visualisation tools and the integration of artificial intelligence into the educational process. Students who used educational software rated its organisational properties and methodological resources quite highly. However, it was clearly shown

that most students and pupils prefer to use educational software that can visualise and generate text and images.

Digitalisation is bringing about fundamental changes in the education system, affecting the processes of teaching, management, organisation and control. Researchers are focusing on the conceptual significance of digitalisation in the context of modern realities, identifying both the advantages and risks associated with the digital transformation of traditional forms of learning. The process of creating and using digital resources has become relevant during the transition to distance learning. Online services are identified as one of the promising digital tools, since each participant in the educational process should be able to effectively and freely choose which online services to use, based on objective, transparent, easily accessible and reliable information. Since 2018, a solid scientific basis for the digitalisation of the educational process has been established in the works of domestic and foreign scientists, in particular V. Kremen *et al.* (2022) outlined the principles and ways of digital transformation of Ukrainian education. The introduction of digital resources into the educational process is considered in various aspects, in particular as a means of improving the organisation of educational activities in secondary and higher education institutions. Scientists pay particular attention to research on the training of the next generation of teachers who will work in conditions of widespread digitalisation. The problems of introducing digital technologies into higher education were the focus of attention of S.M. Illiashenko *et al.* (2022), in particular, the characteristics of external and internal channels of information and knowledge were identified, the interaction of which initiates innovative changes in the university's activities

through digitalisation. An approach was developed to analyse and justify the feasibility of implementing innovative university development projects depending on the level of its readiness for digitalisation. The authors have developed a system of indicators of a university's digital readiness for the implementation of innovative development projects. In particular: technological, personnel and managerial aspects of digital readiness, as well as its expected effectiveness (usefulness).

The research by S. Rodríguez *et al.* (2018) focused on improving digital management platforms by involving virtual organisations. The problems of the impact of digital technologies on humans were raised in the works of A. Baggia *et al.* (2019). The results of this study may serve as a promising direction for further research into the development of Ukrainian digital resources, particularly educational platforms. Scientists also see a threat to the ecosystem of the individual from global educational digitalisation and propose limiting digital control of e-learning. This aspect can also be taken into account when developing centralised management platforms. V. Kumar & D. Sharma (2021), analysing the theoretical perspective of digital learning, identified the characteristics of a successful student-centred e-learning system, including cognitive efficiency, convenience, reliability, effectiveness, self-paced learning, constructive alignment, confidence, flexibility, improvement of skills and knowledge, and student satisfaction. Monitoring conducted by O. Ovcharuk (2023) on teachers' readiness to use ICT for distance learning made it possible to select the most popular digital tools, as well as the means and resources of modern education. A number of studies have been devoted to the use of digital platforms in specific professional fields. For example, D. Zulaiha & Y. Triana (2023) analysed the potential of open educational resources for improving students' foreign language skills. A. Tkachenko (2024) drew attention to online learning platforms (MOOCs, Coursera, edX) from leading universities and companies, which allow students from all over the world to receive a quality education regardless of the place of residence. A.M. Gerevenko *et al.* (2024) pointed out the value of the educational opportunities offered by digital platforms: interactive and collaborative learning, analytical functions that allow teachers to track student progress and adapt learning to the specific needs of each student. In recent publications (Dotsenko & Sobchenko, 2024), the problems of using artificial intelligence as a powerful tool for the digitalisation of educational processes have been actively researched. M.E. Dogan *et al.* (2023), based on scientific publications on the use of AI in education, concluded that artificial intelligence technologies should be oriented towards people and moral and ethical norms. These results were taken into account when analysing the results of the student survey.

According to T. Bates & A. Bozkurt (2025), the growth of AI requires a fundamental shift for teachers – from delivering content to developing skills such as critical thinking, problem solving, and digital literacy. The authors advised

institution leaders to promote team-based course development, advocate for the prevention of monopolies, and build the individual expertise for strategic assessment and integration of new technologies. The study did not address the fundamental challenges of regulating the entire digitalisation process, but its focus on one of the resource issues of preparing future teachers for critical work with digital platforms, taking into account the opinions of all participants in the educational process, was in line with the views of leading educators. Significantly fewer studies have been devoted to the problems of organising students' practical activities. The results of A. Khomenko's (2025) study on the role of digital innovations in higher education were similar to the results of this study, as they emphasise the importance of integrating digital technologies into the educational process, particularly into the professional activities of student teachers. The main research is aimed at developing new formats of educational content and channels for its delivery. There is a common opinion that digital education requires changes in the organisation and content of educational programmes and practical methods. For Ukrainian education, the problems of organising the development of digital platforms are relevant, which was the aim of this study, while foreign scientists are more concerned with ethical and environmental issues, as well as expanding the possibilities of subject and scientific education.

## CONCLUSIONS

The conducted study showed that the integration of digital educational platforms into the training of philology students significantly improved the digital literacy and professional readiness for contemporary educational environments. The theoretical foundation, based on Ukrainian digitalisation policies and interdisciplinary research in pedagogy, philosophy of education, and computer science, provided a comprehensive framework for analysing the pedagogical potential of digital platforms. The use of descriptive and predictive analyses made it possible to identify the main trends in the development of students' digital competence and to evaluate the educational relevance of different types of platforms, including management, academic, communicative, and analytical systems. The survey results confirmed that the majority of participants – teachers, students, and student interns – actively used digital resources in the academic activities. The classification of educational platforms developed by students during practical training demonstrated the multifunctionality of modern digital systems, which simultaneously ensure management, communication, and analytical processes within educational institutions. The study revealed that the most frequently used platforms in Ukrainian schools are New Knowledge, My School, and HUMAN School, while Google Classroom and Moodle remain the most popular tools among university students. Teachers prioritised platforms that support lesson organisation, assessment, and feedback, whereas students showed greater interest in tools that enable visualisation, interactivity, and the integration of artificial intelligence.

The results indicated certain discrepancies between the perceptions of different participant groups. Teachers and student interns rated organisational and analytical functions more highly, considering them effective tools for documentation and monitoring, while school students gave lower ratings due to the perceived increase in control and workload. Importantly, students' independent work in analysing and presenting educational platforms during the internship contributed to the formation of practical digital competence as well as critical and reflective thinking skills. The study also demonstrated that digital transformation in education requires not only technological readiness but also methodological and ethical awareness. It was concluded that the successful integration of digital educational platforms depends on maintaining a balance between management efficiency, pedagogical value, and ethical responsibility.

Further research on this topic is planned, focusing on the quality of students' knowledge in learning, writing term papers, and conducting research using various types of open educational resources in independent and practical activities. Master's thesis topics are also being developed based on the implementation of educational platform resources in the theoretical and practical training of students.

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## REFERENCES

- [1] American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct*. Retrieved from <https://www.apa.org/ethics/code>.
- [2] Baggia, A., et al. (2019). Selecting the e-learning platform for nursing education. In *38<sup>th</sup> International conference on organizational science development: Ecosystem of organizations in the digital age: Conference proceedings* (pp. 49-63). Maribor: University of Maribor. doi: 10.18690/978-961-286-250-3.
- [3] Bates, T., & Bozkurt, A. (2025). A critical scholarly conversation with Tony Bates: Insights on the future of online and distance education. *Open Praxis*, 17(3), 632-637. doi: 10.55982/openpraxis.17.3.968.
- [4] Bozkurt, A., & Sharma, R.C. (2022). [Exploring the learning analytics equation: What about the carpe diem of teaching and learning?](#) *Asian Journal of Distance Education*, 17(2).
- [5] Bykov, V. (2022). On the scientific and scientific-organizational activities of the Institute for Digitalization of Education of the National Academy of Pedagogical Sciences of Ukraine for 2018-2022 and the prospects for its development: Scientific report at the meeting of the Presidium of the National Academy of Pedagogical Sciences of Ukraine. *Bulletin of the National Academy of Pedagogical Sciences of Ukraine*, 4(1), 41-43. doi: 10.37472/v.naes.2022.4143.
- [6] Code of Academic Integrity of the V.G. Korolenko Poltava National Pedagogical University. (2022). Retrieved from <https://pnpu.edu.ua/wp-content/uploads/2022/10/kodeks-akademichno%D1%97-dobrochesnosti-pnpu-imeni-v.-g.-korolenka.pdf>.
- [7] Conceptual and reference framework of digital competence of pedagogical and scientific-pedagogical workers. (2021). Retrieved from [https://drive.google.com/file/d/1WZi3\\_3YJgmrNAcw37QK35YqvQFsd\\_9v6/view?pli=1](https://drive.google.com/file/d/1WZi3_3YJgmrNAcw37QK35YqvQFsd_9v6/view?pli=1).
- [8] Creswell, J.W., & Creswell, J.D. (2022). *Research design: Qualitative, quantitative, and mixed method*. Los Angeles: SAGE Publications.
- [9] Dogan, M.E., Goru Dogan, T., & Bozkurt, A. (2023). The use of artificial intelligence (AI) in online learning and distance education processes: A systematic review of empirical studies. *Applied Sciences*, 13(5), article number 3056. doi: 10.3390/app13053056.
- [10] Dotsenko, S., & Sobchenko, T. (2024). Implementation of artificial intelligence in the scientific environment of higher education institutions of Ukraine. *New Collegium*, 1(113), 11-17. doi: 10.34142/nc.2024.1.11.
- [11] European Commission. (2021). *Digital education action plan (2021-2027)*. Retrieved from <https://education.ec.europa.eu/focus-topics/digital-education/actions>
- [12] Gerevenko, A.M., Ilyina, T.V., & Ibragimova, L.A. (2024). [Using digital platforms to improve the quality of vocational education](#). *Academic Vision*, 31.
- [13] Harvey, P., & Bond, J. (2022). The effects and implications of using open educational resources in secondary schools. *The International Review of Research in Open and Distributed Learning*, 23(2), 107-119. doi: 10.19173/irrodl.v22i3.5293.
- [14] Illiashenko, S.M., Shypulina, Yu.S., & Illiashenko, N.S. (2022). [Digital transformation of educational activities in higher education institutions of Ukraine in war conditions](#). In *Materials of the international scientific and methodological conference "Higher education according to new standards: Challenges in the context of digitalisation and integration into the international educational space"* (pp. 7-10). Kharkiv: Kharkiv National Automobile and Highway University.
- [15] Khomenko, A.V. (2025). Integration of digital technologies into the pedagogical practice of a higher education teacher: A competency-based approach. *Image of a Modern Teacher*, 4(223), 31-39. doi: 10.33272/2522-9729-2025-4(223)-31-39.

- [16] Kremen, V., Bykov, V., Liashenko, O., Lytvynova, S., Lugovyi, V., Malovanyi, Y., Pinchuk, O., & Topuzov, O. (2022). Scientific and methodological provision of digitalisation of education in Ukraine: Status, problems, prospects. *Herald of the National Academy of Educational Sciences of Ukraine*, 4(2). doi: [10.37472/v.naes.2022.4223](https://doi.org/10.37472/v.naes.2022.4223).
- [17] Kumar, V., & Sharma, D. (2021). E-learning theories, components, and cloud computing-based learning platforms. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*, 16(3). doi: [10.4018/IJWLTT.20210501.oa1](https://doi.org/10.4018/IJWLTT.20210501.oa1).
- [18] Liashenko, O., Spirin, O., Lytvynova, S., Pinchuk, O., Ovcharuk, O., & Sukhikh, A. (2024). Conceptual fundamentals for the digitalisation of the educational environment in general secondary education institutions. *Information Technologies and Learning Tools*, 102(4). doi: [10.33407/itlt.v102i4.5829](https://doi.org/10.33407/itlt.v102i4.5829).
- [19] Marienko, M., & Sukhikh, A. (2022). Organization of the educational process in institutions of general secondary education by means of digital technologies during martial law. *Ukrainian Pedagogical Journal*, 2, 31-37. doi: [10.32405/2411-1317-2022-2-31-37](https://doi.org/10.32405/2411-1317-2022-2-31-37).
- [20] Mishra, S. (2025). A review of reviews on open educational resources. *Open Praxis*, 17(2), 305-325. doi: [10.55982/openpraxis.17.2.851](https://doi.org/10.55982/openpraxis.17.2.851).
- [21] Mullens, A.M., & Hoffman, B. (2023). The affordability solution: A systematic review of open educational resources. *Educational Psychology Review*, 35, article number 72. doi: [10.1007/s10648-023-09793-7](https://doi.org/10.1007/s10648-023-09793-7).
- [22] Ouadoud, M., Chkouri, M.Y., Nejari, A., & El Kadiri, K.E. (2016). Studying and comparing the free e-learning platforms. In *2016 4th IEEE international colloquium on information science and technology (CiSt)* (pp. 581-586). Tangier: IEEE. doi: [10.1109/CiST.2016.7804953](https://doi.org/10.1109/CiST.2016.7804953).
- [23] Ovcharuk, O. (2023). Monitoring the readiness of teachers to use digital tools during the war in Ukraine. *Information Technologies and Learning Tools*, 98(6), 52-65. doi: [10.33407/itlt.v98i6.5478](https://doi.org/10.33407/itlt.v98i6.5478).
- [24] Rodríguez, S., Palomino, C.G., Chamoso, P., Silveira, R.A., & Corchado, J.M. (2024). Retraction note to: How to create an adaptive learning environment by means of virtual organizations. In L. Uden, D. Liberona & J. Ristvej (Eds.), *Learning technology for education challenges. Communications in computer and information science* (Vol. 870). Cham: Springer. doi: [10.1007/978-3-319-95522-3\\_26](https://doi.org/10.1007/978-3-319-95522-3_26).
- [25] Spirin, O.M. (2021). [Digitization of education, educational process](https://doi.org/10.1007/978-3-319-95522-3_26). In *Encyclopedia of education* (pp. 1099-1100). Kyiv: Yurincom Inter.
- [26] State Service for Quality Education of Ukraine. (2022). *Report on the results of the study on the organized start of the 2022/2023 academic year in preschool, general secondary, and extracurricular education institutions*. Retrieved from [https://sqe.gov.ua/wp-content/uploads/2022/11/Dovidka\\_pochatok\\_2022-2023\\_ZDO\\_ZZSO\\_ZPO\\_SQE-2022.pdf](https://sqe.gov.ua/wp-content/uploads/2022/11/Dovidka_pochatok_2022-2023_ZDO_ZZSO_ZPO_SQE-2022.pdf).
- [27] The project of digital agend of Ukraine 2020. (2016). Retrieved from <https://uccr.org.ua/uploads/files/58e78ee3c3922.pdf>.
- [28] Tkachenko, A. (2024). Innovations in higher education: New approaches and technologies of education. *Economic Analysis*, 34(3), 110-121. doi: [10.35774/econa2024.03.110](https://doi.org/10.35774/econa2024.03.110).
- [29] Tulashvili, Yu.Y. (2021). Training of specialists in higher education institutions in the realities of digital transformation. *Modern Information Technologies and Innovative Teaching Methods in the Training of Specialists: Methodology, Theory, Experience, Problems*, 60, 116-127. doi: [10.31652/2412-1142-2021-60-116-127](https://doi.org/10.31652/2412-1142-2021-60-116-127).
- [30] Zelinska, A., Tarasovych L., & Lavrynenko S. (2023). Digital competencies as the basis for the transformation of professional education of future managers. *Economy and Society*, 49. doi: [10.32782/2524-0072/2023-49-51](https://doi.org/10.32782/2524-0072/2023-49-51).
- [31] Zinchenko, M., Melnyk, O., Prykhoda, Y., & Zinchenko, I. (2022). Ukrainian e-learning platforms for schools: Evaluation of their functionality. *The International Review of Research in Open and Distributed Learning*, 23(2), 136-150. doi: [10.19173/irrodl.v23i2.5769](https://doi.org/10.19173/irrodl.v23i2.5769).
- [32] Zulaiha, D., & Triana, Y. (2023). Students' perception of the use of open educational resources to improve writing skills. *Studies in English Language and Education*, 10(1), 174-196. doi: [10.24815/siele.v10i1.25797](https://doi.org/10.24815/siele.v10i1.25797).

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## **Цифрові освітні платформи як навчальний ресурс для майбутніх учителів-філологів**

**Анотація.** Дослідження інтеграції цифрових освітніх платформ у навчальний процес закладів вищої педагогічної освіти, зокрема в практичну діяльність студентів, є важливим етапом цифрової трансформації вищої та середньої освіти. Метою дослідження було визначення ефективності використання різних типів сучасних освітніх платформ у теоретичній і практичній підготовці студентів педагогічних спеціальностей. Ефективність інтеграції цифрових освітніх платформ у підготовку студентів-філологів перевірялася за допомогою описового та прогностичного аналізу. Підготовча робота до практичної діяльності майбутніх учителів полягала у визначенні типів цифрових освітніх платформ за призначенням і функціями (управлінські, навчальні, ігрові, комунікаційні та аналітичні), а також за інноваційними характеристиками (зворотний зв'язок, штучний інтелект тощо). Запропонована кольорова індексація цифрових освітніх платформ слугувала допоміжним інструментом для визначення їхніх функціональних можливостей. Результати дослідження показали, що студенти й викладачі загалом обізнані з цифровими ресурсами та розуміють їхні переваги й недоліки. Оцінки освітніх платформ та їхніх освітніх можливостей за п'ятибальною шкалою суттєво різнилися серед респондентів – студентів-практикантів, учителів шкіл та учнів закладів загальної середньої освіти. Учителі та студенти-практиканти оцінили електронні управлінські платформи й навчальний контент на 1,5 бали вище, ніж учні. Водночас використання інтерактивних форм навчання, комунікаційних можливостей і штучного інтелекту учні оцінили на 2-2,5 бали вище, ніж учителі. Результати дослідження засвідчили, що впровадження цифрових освітніх платформ сприяє професійній підготовці студентів і допомагає вчителям закладів загальної середньої освіти усвідомити навчальні очікування учнів щодо використання цифрових ресурсів

**Ключові слова:** формування компетентностей; інтеграція; професійна підготовка; інтерактивні технології; навчальна діяльність; курикулярна конвергенція; управлінські платформи