

Xhensila, A. (2024). Lifelong Learning Interdisciplinary. *Journal of Research and Development*, 11 (1), 27-32. Doi: 10.56345/ijrdv11n105 URL: file:///C:/Users/ASUS/Downloads/Lifelong_Learning.pdf.

Zolfagharian, A., & Khalilpour, J. (2015). Evaluation and content analysis of "English for Aviation for Pilots and Air Traffic Controllers" Textbook as an ESP Book. *International Journal of Language Learning and Applied Linguistic World (IJLLALW)*, 8 (2), 36-50. URL: file:///C:/Users/ASUS/Downloads/EVALUATION_AND_CONTENT_ANALYSIS_OF_ENGLI.pdf.

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ОСНОВИ ПРОФЕСІЙНОЇ ТА КОМУНІКАТИВНОЇ КОМПЕТЕНТНОСТІ АВІАДИСПЕТЧЕРІВ У США

Резюме

У цій статті досліджується основи професійної та комунікативної компетентності, необхідної для диспетчерів управління повітряним рухом (УПР). **Мета.** У статті розглядаються визначення, надані міжнародними авіаційними органами, основні елементи, які складають ці компетенції, методи, що використовуються для їх підготовки та оцінювання, а також їх загальний вплив на безпеку польотів та операційну ефективність. Також розглядаються труднощі, що виникають при підтримці цих стандартів, і обговорюються майбутні зміни, що впливають на навички та досвід, необхідні для УПР. **Методи.** У роботі використано визначення та стандарти таких організацій, як Міжнародна організація цивільної авіації (ІКАО) та Федеральне управління цивільної авіації (ФАА). Також проаналізовано різні документи і публікації, пов'язані з управлінням повітряним рухом, підготовкою і знанням мови. **Результати.** У статті підкреслюється, що професійна компетентність забезпечує фундаментальні знання та навички для управління повітряним рухом, тоді як комунікативна компетентність дозволяє органам УПР ефективно застосовувати ці знання у взаємодії в режимі реального часу, забезпечуючи безпеку та ефективність повітряних перевезень. Детально обговорюється система ІКАО та вимоги FAA. **Висновок.** Професійна та комунікативна компетентність авіадиспетчерів має важливе значення для безпечного та ефективного потоку повітряного руху. Обидві компетентності розвиваються шляхом ретельної підготовки і постійного оцінювання, щоб забезпечити ефективне подолання труднощів управління повітряним рухом і підтримання безпеки польотів.

Ключові слова: авіадиспетчери; авіаційна англійська мова; вимоги до рівня володіння мовою; професійна та комунікативна компетентність; підготовка.

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COMPARATIVE ANALYSIS OF APPROACHES TO FORMING DIGITAL COMPETENCE OF FUTURE PHILOLOGISTS IN TECHNICAL UNIVERSITIES IN UKRAINE AND UNIVERSITIES ABROAD

Abstract

The article presents the results of theoretical and empirical analysis of approaches to the development of digital competence among future philologists in technical universities in Ukraine and universities abroad. **The aim** of the study is to conduct a comparative analysis of the theoretical foundations and practical aspects of integrating digital components into humanities-oriented educational programs under the conditions of digital transformation in education. The research includes the systematization of scholarly sources, educational standards, and regulatory documents, with a focus on the DigComp and DigCompEdu frameworks and their adaptation within the Ukrainian educational context. Particular attention is given to the content of digital modules in philological training programs, didactic principles of their implementation, and the role of instructors in the digitalization of the learning process. The empirical part of the study is based on **content** analysis of philology-related educational programs offered at Ukrainian

technical universities (Ihor Sikorsky Kyiv Polytechnic Institute, National Aerospace University "Kharkiv Aviation Institute", State University "Kyiv Aviation Institute" and leading European higher education institutions (University of Helsinki, TU Dresden, University of Warsaw). **Results.** The study reveals significant differences between the approaches: Ukrainian institutions tend to exhibit fragmented, sporadic, and elective-based digital instruction, lacking coherent digital learning trajectories. In contrast, European universities demonstrate systematic, interdisciplinary integration of digital competences into educational processes, incorporating digital platforms, tools, and research projects. The study also highlights disparities in instructors' digital proficiency and the availability of institutional support for digital education initiatives. **The conclusion** emphasizes the need to update educational strategies in Ukraine by implementing comprehensive digital curricula, developing interdisciplinary programs, and enhancing educators' digital qualifications in alignment with European standards.

Keywords: Keywords: comparative analysis, digital competence; interdisciplinarity, digital transformation of education, educational program, approaches, linguistics; education; pedagogy; philologists; technical university, digitalization.

Introduction. In modern conditions of digital transformation of education, the formation of digital competence among students is becoming particularly relevant, especially for future philologists studying at technical universities. The shift in educational paradigms and the emergence of new digital tools for processing, analyzing, and teaching linguistic material necessitate a rethinking of approaches to the professional training of philologists, taking into account the digital component. In this context, digital competence emerges not only as a set of technical skills but as an integrated characteristic of professional activity, including the ability to effectively use digital technologies for communication, learning, research, and intercultural interaction.

Despite the active digitalization of education, the issue of forming digital competence specifically for philologists studying at technical universities, where an engineering and technical educational context predominates, remains insufficiently covered in scientific discourse. Furthermore, there's a noticeable gap between approaches applied in Ukraine and international practices, which significantly outpace domestic ones in the degree of integration of digital technologies into humanities curricula.

Analysis of scholarly works (specifically research by the European Commission within DigComp and DigCompEdu, works by authors such as A. Yershova, O. Spirina, L. Lytvynova, as well as foreign researchers - J. Redecker, Y. Punie, S. Beetham) indicates that digital competence is interpreted as a dynamic structure that includes information literacy, communication flexibility, creative use of digital tools, and critical thinking. At the same time, the necessity of developing adaptive training models that consider the specifics of the profession and the context of the higher education institution is emphasized.

International educational practice demonstrates significant progress in the standardization and systematization of digital training for humanities specialists. In contrast, this activity in Ukraine is often episodic and fragmented. Therefore, a comparative analysis of existing approaches is relevant to identify effective practices and opportunities for their implementation into the national educational system.

The aim of the research is the conducting a comparative analysis of approaches to developing digital competence in future philologists at a technical university in Ukraine and in foreign higher education institutions, considering the theoretical foundations and practical aspects of educational program implementation.

Research objectives:

1. Conducting a theoretical analysis of scientific sources regarding the essence of digital competence and methods of its formation in philological education.
2. Describing the peculiarities of implementing the digital component in educational programs for philologists in Ukrainian technical universities.
3. Analyzing the experience of foreign higher education institutions concerning the development of digital competences in future philologists.
4. Identifying common features and differences between Ukrainian and foreign approaches.

Research methods and techniques. In the process of research, a set of methods was applied that cover both the theoretical and methodological and empirical levels of analysis, which allowed for a comparative study of approaches to the formation of digital competence of future philologists in the conditions of technical universities of Ukraine and foreign countries. In particular, at the theoretical and methodological level, an analysis of scientific literature was applied to clarify the content of the concept of "digital competence", determine its structure, components, didactic principles of formation and modern

approaches to the digital transformation of education; analysis of regulatory documents for the study of state and international educational standards (National Digital Competence Framework of Ukraine (based on DigComp), educational standards of the specialty "Philology" in Ukraine and the EU, recommendations of the European Commission (DigCompEdu, Digital Education Action Plan), etc. The comparative-analytical method allowed us to identify differences and common features in approaches to the formation of digital competence in the domestic and foreign educational environment. The empirical level of research, in particular, content analysis of educational programs for professional training of philologists at technical universities of Ukraine (Ihor Sikorsky Kyiv Polytechnic Institute, National Aerospace University "Kharkiv Aviation Institute", State University "Kyiv Aviation Institute") and leading foreign institutions (University of Helsinki, Technische Universität Dresden, University of Warsaw), allowed us to establish the level of integration of digital technologies into the educational process.

The research proceeded in three stages. The first stage involved selecting and organizing scientific literature, educational standards, and curricula. The second stage entailed a content and comparative analysis of educational programs. Finally, the third stage focused on synthesizing empirical data and qualitatively analyzing the results, leading to conclusions on the state and prospects of digital competence development for future philologists in technical universities.

This methodological approach provided a comprehensive understanding of the phenomenon at both conceptual and applied levels.

Results. The studying results show that the formation of digital competence of future philologists at a technical university is a complex and multifaceted process that depends on a whole range of factors: educational policy, curricula, the level of digital infrastructure, pedagogical approaches, and the teachers' professional readiness.

On a theoretical level, we have identified that the concept of "digital competence" is dynamic, encompassing not only technical skills but also informational, communication, sociocultural, and critical-analytical components (Redecker, 2017; Yershova, 2021). According to the DigComp 2.2 model, digital competence is defined as the ability to use digital technologies safely, critically, and responsibly for learning, work, and participation in society (European Commission, 2022).

The National Digital Competency Framework of Ukraine (based on DigComp) is partially adapted to the needs of humanities education, but the practical implementation of its principles in technical higher education institutions is fragmentary (Vizniuk, 2020). Philology training programs at such Ukrainian universities as Ihor Sikorsky Kyiv Polytechnic Institute, National Aerospace University "Kharkiv Aviation Institute", State University "Kyiv Aviation Institute" demonstrate an uneven inclusion of digital disciplines: from separate courses such as "Digital Technologies in Linguistics" to embedded modules using digital tools in the practice of teaching foreign languages.

A content analysis of curricula has revealed that digital training for philologists in Ukraine is mostly auxiliary. Its goal is providing students with a basic understanding of how to use ICT in their professional activities (Lytvynova, 2020). For instance, at Ihor Sikorsky Kyiv Polytechnic Institute, for specialty 035 "Philology," digital components are offered as elective courses or electives, rather than being a mandatory part of specialized training.

In the context of studying the peculiarities of forming digital competence in future philologists, particular attention was paid to the analysis of the curricula of three leading technical universities in Ukraine: Ihor Sikorsky Kyiv Polytechnic Institute, National Aerospace University "Kharkiv Aviation Institute" and State University "Kyiv Aviation Institute". The choice of these institutions was predefined by their representativeness in the field of implementing digital technologies and the presence of philological specializations, specifically English translation.

In the structure of the educational program for specialty 035 "Philology" at the Faculty of Linguistics, Ihor Sikorsky Kyiv Polytechnic Institute, the digital component is represented by several elective disciplines, including "Information Technologies in Translation Activities" and "Digital Tools in Linguistics." However, there is no comprehensive digital trajectory that would ensure the systematic formation of digital competence throughout the entire period of study. The teaching of digital disciplines does not always involve a practice-oriented approach, which reduces their effectiveness (Lytvynova, 2020: 17). The curriculum demonstrates a certain isolation of digital courses from the overall logic of professional training. Consequently, there is a fragmentation of digital education, which is confirmed by previous research (Lytvynova, 2020).

A unique aspect of the digital component's implementation at National Aerospace University "Kharkiv Aviation Institute" is the attempt to combine the university's technical orientation with the

philological training of its students. The curricula for specialty 035 "Philology" at the Faculty of Humanities and Law include courses like "Multimedia Tools for Foreign Language Learning," "Computational Lexicography," and "Machine Translation Technologies." These courses provide examples of the practical application of digital tools such as corpus technologies, automated translation systems, and programs for linguistic analysis (Ministry of Education and Science of Ukraine, 2021). However, according to internal monitoring data, despite the university's technical profile, the philological programs do not yet ensure full interdisciplinary integration, and digital elements remain auxiliary (Lytvynova, 2020).

At State University "Kyiv Aviation Institute", despite its predominantly aviation and technical profile, humanities programs are being implemented with increased attention to digitalization. Within specialty 035 "Philology", the discipline "Modern Information Technologies in Translation Activities" is taught, and "Computer-Assisted Translation Practice" is included. Furthermore, students have access to an electronic learning environment integrated with LMS Moodle, which fosters the development of digital literacy. However, similar to other analyzed higher education institutions, digital training is not comprehensive. Individual digital elements are not always linked to core philological competencies (Howard, 2008; Smith, Grimm & Shell, 2017).

The analysis shows that the digital component in philological education at technical universities in Ukraine is at the stage of formation. The most characteristic are:

- episodic inclusion of digital disciplines;
- limited number of courses with practical digital application;
- lack of end-to-end integration of digital competence into the educational process.

This situation requires improving strategic approaches to the formation of digital competence of future philologists in accordance with the European recommendations DigCompEdu (Redecker, 2017; Vuorikari, Kluzer & Punie, 2022) and the National Digital Competence Framework (MES of Ukraine, 2021).

In contrast, international universities such as the University of Helsinki, Technische Universität Dresden, and the University of Warsaw demonstrate a more systemic integration of digital technologies into their curricula. At Dresden TU, for instance, the Digital Humanities module is compulsory for philological specialties and involves the use of software for corpus analysis, machine translation, speech recognition, and digital linguistics. The University of Helsinki actively employs a hybrid learning model, supported by platforms like Moodle, Panopto, and AI Tools for Language Learning (Smith, Grimm & Shell, 2017).

We have formulated the key differences and similarities in the approaches to forming digital competence among future philologists in Ukrainian technical universities and foreign universities in Table 1.

Table 1. Comparative table of approaches to developing digital competence of future philologists

Criteria	Ukrainian technical universities (KPI, Kharkiv Institute of Technology, KAI)	Foreign universities (TU Dresden, University of Helsinki, University of Warsaw)
Presence of digital components in curricula	Partially integrated (usually in the form of electives or electives)	Systemically integrated into the mandatory part of the program
Level of digital integration into the educational process	Moderate; digital tools are used sporadically	High; use of digital platforms, tools and methodologies is widespread
Course topics	Basic ICT literacy, chosen topics at the level of general awareness	Digital Humanities, corpus linguistics, language technologies, artificial intelligence
Methodological support	There is a lack of methodological materials with a focus on digital philology	Clearly structured modules with instructions, online resources, interactive platforms
Teacher training	Low level of digital pedagogical competence; self-study	Special advanced training programs in digital pedagogy (based on DigCompEdu)
Types of used digital tools	PowerPoint, Google Workspace, Padlet (limited)	Moodle, Panopto, AI Tools, Sketch Engine, Voyant Tools, e-learning labs

Level of interdisciplinarity	Limited; digital technologies are not integrated into other humanities disciplines	High; interdisciplinary courses at the intersection of IT, linguistics, and cultural studies
Form of implementation of digital competence	Fragmentary; not always assessed as a separate educational outcome	Systemic; assessment of digital skills is a component of professional certification
Institutional support	Episodic; depends on the initiatives of individual departments or teachers	Digital Education Centers, Institutional Strategy for University Digitalization

The results obtained demonstrate significant differences between Ukrainian and foreign universities in terms of integrating digital competencies into philological education. In Ukraine, digital disciplines are usually episodic in nature and are often presented as selective, which reduces their effectiveness in forming holistic digital competence. On the contrary, in foreign universities the digital component is not only mandatory, but also conceptually integrated into the content of professional training. It is especially worth emphasizing that in European practices digital technologies act not only as a learning tool, but also as an object of study, which allows students to master such areas as corpus linguistics, digital text analysis, natural language processing. High-quality methodological support also plays an important role in this process: in many universities (for example, the University of Helsinki) there are specialized online platforms and resources to support digital learning, while in Ukrainian higher education institutions this area is mostly developed by the efforts of individual enthusiasts.

The level of interdisciplinary interaction also turned out to be higher in foreign educational institutions, where the humanitarian and technical components of the programs are harmoniously combined, while in Ukraine the technical context does not yet play the role of a full-fledged catalyst for digital humanities. Also significant is the support at the university level strategy, which ensures the sustainability and systematicity of digital initiatives in leading European universities (Picture 1).

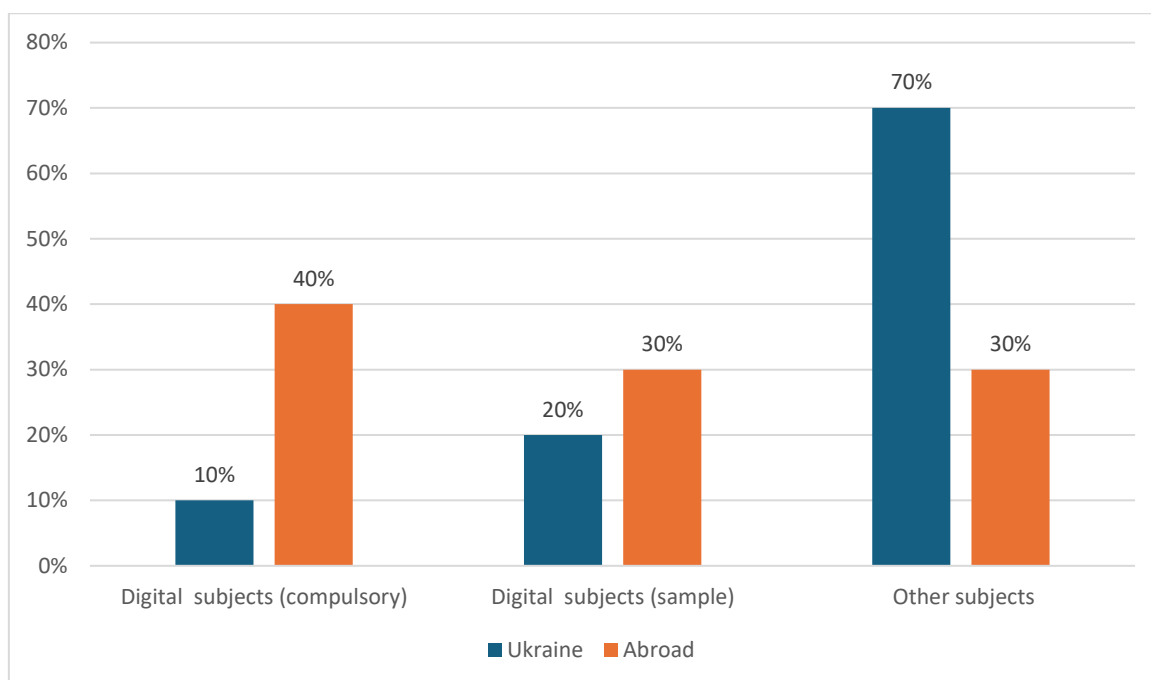
Comparative analysis revealed the following common features:

- awareness of digital competence as a key component of professional training;
- use of the international DigComp framework as a basis for standardization;
- striving to integrate digital technologies into practical aspects of philological activity.

The differences, however, are that:

- in Ukraine, a fragmented, optional approach to digital education dominates, while in EU countries digital competence is a systemic element of the curriculum;
- Ukrainian HEIs often have not got specialized training courses focused on digital humanities, while in European HEIs it is part of mandatory training (Howard, 2008);
- foreign universities actively involve students in research projects with a digital component, which contributes to the development of critical thinking and research independence.

Thus, the studying allow us to conclude that the effective formation of digital competence of future philologists at technical universities requires a revision of educational strategies in Ukraine taking into account successful foreign practices, a broader integration of digital technologies into professional training, the development of interdisciplinary courses, and updating the qualification requirements for teachers.



Picture 1. The share of digital disciplines in philology training programs

Discussion. The obtained results indicate a significant uneven integration of digital competencies into philological education at technical universities in Ukraine. This conclusion correlates with previous studies (Lytvynova, 2020), which also note the fragmentary nature of digital components in curricula and the lack of a systematic approach to digital training of humanities students in a technical context. In contrast, data on foreign universities obtained in the process of comparative analysis confirm the conclusions of J. Redecker and Y. Punie (2017), which indicate that European technical higher education institutions are actively implementing Digital Humanities as a component of professional training, creating appropriate digital educational ecosystems.

Compared with the results of studies by Vuorikari, Kluzer & Punie (2022), which emphasize the importance of pedagogical digital competence of teachers, the results of this work indicate its insufficient level in Ukrainian conditions. The lack of specialized advanced training programs for teachers of philological disciplines at technical universities appears to be one of the key obstacles to the effective integration of digital technologies.

One of the limitations of the results is the limited range of HEIs studied: although the choice of three Ukrainian and three foreign universities is justified in terms of representativeness, it does not allow generalizing the conclusions to all technical universities in Ukraine or leading European ones. In addition, the study is descriptive in nature and requires quantitative verification - for example, through surveys of students and teachers on the level of digital competence.

Further areas of research may include:

- development of indicators for assessing the digital competence of philologists in a technical environment;
- implementation of experimental educational modules in digital humanities and assessment of their effectiveness;
- analysis of the impact of digital infrastructure and support from university administrations on the quality of digital education;
- study of the experience of interdisciplinary interaction of IT and humanities specialists in creating joint educational programs.

Thus, the discussion of the research results allows not only to confirm their relevance, but also to outline new vectors of scientific research in the field of digital transformation of humanitarian education in technical higher education institutions.

Conclusions. The conducted study showed that the formation of digital competence of future philologists in technical universities is a multifaceted and systematically insufficiently implemented process. In the context of digital transformation of education, digital competence should be considered as a key component of professional training, combining technical, communicative, analytical and socio-cultural components.

Analysis of educational programs of Ukrainian technical universities (Ihor Sikorsky Kyiv Polytechnic Institute, National Aerospace University "Kharkiv Aviation Institute", State University "Kyiv Aviation Institute") revealed the fragmentation of the integration of the digital component, a limited number of specialized disciplines, an insufficient level of methodological support and limited digital training of teachers. Digital elements in most cases are not a mandatory part of the curriculum and are not assessed as an independent educational outcome.

Comparison with the practices of leading foreign universities (Technische Universität Dresden, University of Helsinki, University of Warsaw) revealed a significantly higher level of digital integration, systematic approaches, the availability of specialized courses and platforms, interdisciplinary orientation of educational programs, and institutional support for digital initiatives.

The results obtained confirm the need to improve digital education strategies for philologists in Ukrainian technical higher education institutions by: developing end-to-end digital modules; implementing modern digital tools and methodologies; improving the digital competence of teachers; and institutional support at the university policy level.

Thus, the implementation of a holistic approach to the formation of digital competence of future philologists will contribute to their professional readiness for effective activity in a digital society.

REFERENCES

- Beetham, H. (2015). *Developing digital literacies*. Routledge.
- Vizniuk, V. (2020). Tsyfrova kompetentnist maibutnikh pedahohiv yak nevidiemna skladova profesiinoi pidhotovky [Digital competence of future teachers as an integral component of professional training]. *Naukovi zapysky Ternopilskoho natsionalnoho pedahohichnoho universytetu imeni Volodymyra Hnatiuka. Seriya: pedahohika - Scientific notes of the Volodymyr Hnatiuk Ternopil National Pedagogical University. Series: Pedagogy*, 1(19), 17.
- European Commission (2022). DigComp 2.2: The Digital Competence Framework for Citizens. Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/115376>
- Howard, R. (2008). Digital Humanities and the Future of Scholarly Communication. *Journal of Scholarly Publishing*, 39(3), 197-206. <https://doi.org/10.3138/jsp.39.3.197>
- Lytvynova, L. (2020). Formuvannia tsyfrovoi kompetentnosti fakhivtsiv humanitarnoho profilu. Problemy suchasnoho pidruchnyka [Formation of digital competence of humanities specialists. *Problems of the Modern Textbook*], 24, 11-22.
- Ministry of Education and Science of Ukraine. (2021). Natsionalna ramka tsyfrovoi kompetentnosti dlia hromadian (na osnovi DigComp) [National Digital Competence Framework for Citizens (based on DigComp)]. <https://mon.gov.ua/>
- Redecker, C. (2017). European Framework for the Digital Competence of Educators: DigCompEdu. Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/159770>
- Smith, M., Grimm, S., & Shell, D. (2017). Hybrid Learning Models in Digital Linguistics. *Computer Assisted Language Learning*, 30(3-4), 312-329. <https://doi.org/10.1080/09588221.2017.1304963>
- Vuorikari, R., Kluzer, S., & Punie, Y. (2022). DigCompEdu: Empowering educators for digital education. Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/375209>
- Yershova, A. (2021). Tsyfrova hramotnist' yak skladova profesiinoi pidhotovky maibutnikh pedahohiv [Digital literacy as a component of future teachers' professional training]. *Informatsiini tekhnolohii v osviti – Information Technologies in Education*, 45, 45-53.

СПИСОК ЛІТЕРАТУРИ

- Beetham, H. (2015). *Developing digital literacies*. Routledge.
- Візнюк, В. (2020). Цифрова компетентність майбутніх педагогів як невід'ємна складова професійної підготовки. *Наукові записки Тернопільського національного педагогічного університету імені Володимира Гнатюка. Серія: педагогіка*, 1(19), 17.
- European Commission (2022). DigComp 2.2: The Digital Competence Framework for Citizens. Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/115376>
- Howard, R. (2008). Digital Humanities and the Future of Scholarly Communication. *Journal of Scholarly Publishing*, 39(3), 197-206. <https://doi.org/10.3138/jsp.39.3.197>
- Литвинова, Л. (2020). Формування цифрової компетентності фахівців гуманітарного профілю. *Проблеми сучасного підручника*, 24, 11-22.

Міністерство освіти і науки України. (2021). Національна рамка цифрової компетентності для громадян (на основі DigComp 2.1). <https://mon.gov.ua/>.

Redecker, C. (2017). European Framework for the Digital Competence of Educators: DigCompEdu. Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/159770>

Smith, M., Grimm, S., & Shell, D. (2017). Hybrid Learning Models in Digital Linguistics. Computer Assisted Language Learning, 30 (3-4), 312-329. <https://doi.org/10.1080/09588221.2017.1304963>

Vuorikari, R., Kluzer, S., & Punie, Y. (2022). DigCompEdu: Empowering educators for digital education. Publications Office of the EU. <https://data.europa.eu/doi/10.2760/375209>

Ершова, А. (2021). Цифрова грамотність як складова професійної підготовки майбутніх педагогів. *Інформаційні технології в освіті*, 45, 45-53.

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ПОРІВНЯЛЬНИЙ АНАЛІЗ ПІДХОДІВ ДО ФОРМУВАННЯ ЦИФРОВОЇ КОМПЕТЕНТНОСТІ МАЙБУТНІХ ФІЛОЛОГІВ У ТЕХНІЧНОМУ УНІВЕРСИТЕТІ В УКРАЇНІ ТА УНІВЕРСИТЕТАХ ЗАРУБІЖЖЯ

Резюме

У статті представлено результати теоретичного й емпіричного аналізу підходів до формування цифрової компетентності майбутніх філологів у технічних університетах України та університетах зарубіжжя. **Мета** дослідження полягає у здійсненні порівняльного аналізу теоретичних засад і практичних аспектів цифрової складової в освітніх програмах гуманітарного спрямування в умовах цифрової трансформації освіти. Проведено систематизацію наукових джерел, освітніх стандартів і нормативних документів з акцентом на модель DigComp, DigCompEdu та їх адаптацію в українському освітньому середовищі. Особливу увагу приділено змістовому наповненню цифрових компонентів у програмах підготовки філологів, дидактичним принципам їх впровадження та ролі викладача у процесі цифровізації навчання. Емпіричне дослідження реалізоване у **формі** контент-аналізу освітніх програм філологічних спеціальностей у технічних університетах України (КПІ ім. І. Сікорського, ХАІ, КАІ) та провідних європейських ЗВО (University of Helsinki, TU Dresden, University of Warsaw). **Результати.** Виявлено суттєві розбіжності між підходами: українські університети демонструють фрагментарність, епізодичність і факультативність цифрових дисциплін, відсутність наскрізних цифрових траєкторій; натомість зарубіжні ЗВО забезпечують системну, міждисциплінарну інтеграцію цифрових компетентностей в освітній процес, використання цифрових платформ, інструментів і дослідницьких проєктів. Також встановлено відмінності у рівні цифрової підготовки викладачів і наявності інституційної підтримки цифрових освітніх ініціатив. Зроблено **висновок**, що ефективне формування цифрової компетентності майбутніх філологів вимагає оновлення освітньої стратегії, впровадження наскрізних цифрових курсів, розробки міждисциплінарних програм і підвищення цифрової кваліфікації викладачів відповідно до європейських рекомендацій.

Ключові слова: порівняльний аналіз, цифрова компетентність; інтердисциплінарність, цифрова трансформація освіти, освітня програма, підходи, лінгвістика; освіта; педагогіка; філологи; технічний університет, цифровізація.