МРНТИ 14.35.07

10.48501/9536.2024.73.52.001

V. M. Puhach

Vinnytsia Educational and Scientific Institute of Economics Western Ukrainian National University, Ukraine, e-mail: pugachvitalina@gmail.com

THE IMPACT OF DIGITAL TECHNOLOGIES ON THE PROFESSIONAL TRAINING OF FUTURE LAWYERS IN HIGHER EDUCATION INSTITUTIONS

Abstract. In the era of dynamic development of digital governance and digital innovation, the legal industry faces a number of significant challenges and prospects. The proliferation of digital technologies such as 3D modelling, virtual reality and artificial intelligence is fundamentally transforming approaches to the training of future lawyers, as the existing skills and training system for legal professionals are insufficient to effectively use these new digital tools.

The purpose of the article is to study and analyse the impact of modern digital technologies on the process of education and training of future legal professionals, in particular, to determine the effectiveness of digital technologies in legal education.

The authors examine various aspects of the impact of digital technologies on the development of legal education, such as the effectiveness of digital tools in the educational process, the development of digital literacy among students, changes in teaching methods due to the introduction of digital technologies, and preparation of students for work in the modern information society. The article determines the effectiveness of the use of digital tools in curricula, assesses their impact on the development of key skills and competences of future lawyers, and develops recommendations for the optimal use of digital technologies to improve the quality of education in this field.

We consider experimental studies of future lawyers' readiness for the effective use of digital technologies in their professional activities to be prospects for further research.

Key words: digital technologies, professional training of lawyers, technological development, digitalisation of education, artificial intelligence

В. М. Пугач

Винницкий учебно-научный институт экономики Западноукраинского национального университета Украина, Винница e-mail: pugachvitalina@gmail.com

Влияние цифровых технологий на профессиональную подготовку будущих правоведов в учреждениях высшего образования

Аннотация. Юридическая отрасль в эпоху динамичного развития цифрового управления и цифровых инноваций сталкивается с рядом существенных вызовов и перспектив. Распространение цифровых технологий, таких как 3D-моделирование, виртуальная реальность и искусственный интеллект, кардинально трансформирует подходы к профессиональной подготовке будущих юристов, ведь имеющиеся навыки и система подготовки специалистов в области правоведения недостаточны для эффективного использования этих новых цифровых инструментов.

Цель статьи заключается в изучении и анализе влияния современных цифровых технологий на процесс обучения и подготовку будущих специалистов в области права, в частности определение эффективности использования цифровых технологий в юридическом образовании.

Авторами исследованы различные аспекты влияния цифровых технологий на развитие юридического образования, такие как эффективность использования цифровых средств в учебном процессе, развитие цифровой грамотности среди студентов, изменения в методиках преподавания из-за внедрения цифровых технологий, а также подготовку студентов к работе в современном информационном обществе. Определена эффективность использования цифровых инструментов в учебных программах, осуществлена оценка их влияния на развитие ключевых навыков и компетенций у будущих правоведов, а также разработаны рекомендации по оптимальному использованию цифровых технологий для повышения качества образования в этой области.

Перспективами дальнейшего исследования считаем экспериментальные исследования готовности будущих юристов к эффективному использованию цифровых технологий в своей профессиональной деятельности.

Ключевые слова: цифровые технологии, профессиональная подготовка юристов, технологическое развитие, Диджитализация образования, искусственный интеллект.

В. М. Пугач

Винница оқу-ғылыми экономика институты, Батыс Украина ұлттық университеті Украина, Винница e-mail: pugachvitalina@gmail.com

Жоғары оқу орындарында болашақ заңгерлерді кәсіби дайындауға цифрлық технологиялардың әсері

Аннотация. Құқықтық индустрия цифрлық басқару мен цифрлық инновацияның серпінді дамуы дәуірінде бірқатар маңызды міндеттер мен перспективаларға тап болады. 3D модельдеу, виртуалды шындық және жасанды интеллект сияқты цифрлық технологиялардың таралуы болашақ заңгерлерді кәсіби даярлауға деген көзқарастарды түбегейлі өзгертеді, өйткені заң мамандарын даярлаудың қолданыстағы жүйесі осы жаңа цифрлық құралдарды тиімді пайдалану үшін жеткіліксіз.

Мақаланың мақсаты – қазіргі заманғы цифрлық технологиялардың оқу үдерісі мен болашақ құқық саласындағы мамандарды даярлауға әсерін зерттеу және талдау, атап айтқанда, құқықтық білім беруде цифрлық технологияларды қолданудың тиімділігін анықтау.

Авторлар білім беру үдерісінде цифрлық құралдарды пайдаланудың тиімділігі, студенттердің цифрлық сауаттылығын дамыту, оқыту әдістерін енгізуге байланысты оқыту әдістерінің өзгеруі сияқты құқықтық білімнің дамуына цифрлық технологиялардың ықпалының әртүрлі аспектілерін қарастырды. цифрлық технологиялар, сондайақ студенттерді заманауи ақпараттық қоғамда жұмыс істеуге дайындау. Білім беру бағдарламаларында цифрлық құралдарды пайдаланудың тиімділігі анықталды, олардың болашақ заңгерлердің негізгі дағдылары мен құзыреттерін дамытуға әсері бағаланды және осы салада білім сапасын арттыру үшін цифрлық технологияларды оңтайлы пайдалану бойынша ұсыныстар әзірленді. аумақ.

Біз болашақ заңгерлердің кәсіби қызметінде цифрлық технологияларды тиімді пайдалануға дайындығын эксперименталды зерттеулерді әрі қарайғы зерттеулердің болашағы ретінде қарастырамыз.

Негізгі сөздер: цифрлық технологиялар, заңгерлерді кәсіби даярлау, технологиялық даму, білім беруді цифрландыру, жасанды интеллект

Introduction. As society becomes increasingly digitalised, the educational process is becoming impossible without the use of modern technologies. One of the key areas of education development in Ukraine is the introduction of digital technologies contribute to improving the educational process, increasing the accessibility and effectiveness of learning, and preparing future professionals for life in a digital society, which underlines the relevance of this study. In the digital age in Ukraine, there is a need for appropriate changes in the education system, especially in the training of future professionals who need to learn how to use modern digital technologies in their professional activities. This leads to the problem of introducing digital methods and tools into the educational process, which enhance perception and understanding of the content of any discipline.

In today's environment, distance learning has become a priority, so teachers face a number of challenges: how to effectively interact with students remotely; what are the features of online lessons, which applications contribute to the effective delivery of online classes, how to present material in a quality manner; how to check assignments, etc. Thus, with the development of digital technologies, there is an urgent need to introduce them into the educational process to ensure effective learning and achieve positive learning outcomes.

The purpose of the article is to study and analyse the impact of modern digital technologies on the process of education and training of future legal professionals, in particular, to determine the effectiveness of digital technologies in legal education.

The main part. With the development of digitalisation of society, the importance of digital technologies in the professional training of future specialists is becoming obvious. This has been emphasised by domestic and international scholars. Thus, S. Dembitska, O. Kuzmenko and others [1; 3; 4] have developed ways to digitalise the educational environment of higher education institutions. The problem of integrating traditional and digital teaching methods is

covered in articles [2; 5; 6], and the main ways to improve professional training in the context of innovative development of higher education are presented in publications [7; 8; 12]. The methodological foundations of the use of digital technologies in education were studied by O. Kostetska and others [11].

V. Kuibida, O. Karpenko and V. Namestnik [13] considered the conceptual framework of digital governance, including its definition, principles, goals and models. Interesting in the context of our study is the article by S. Kvitka, who describes the rapid transformation of the role of digital technologies in the training and development of skills of civil servants responsible for the preservation of cultural heritage [10]. We agree with the scientist that the integration of these innovations is revolutionising traditional practices, making adaptive training of civil servants a necessity. Digital technologies not only strengthen the protection of cultural heritage, but also make it more accessible to a wider audience.

An analysis of these studies shows that in the modern world, thanks to favourable conditions, it is possible to actively introduce digital technologies into the educational process. In addition, from 2019 to 2023, Ukraine demonstrated a rapid increase in the level of digital literacy of the population. This is confirmed by a significant increase in the share of Internet users in different age groups, especially among young people and people with disabilities [9]. This progress demonstrates the growing importance of inclusive access to digital resources for the country's overall socioeconomic development.

Therefore, it is important to develop the digital literacy and competencies necessary for the use of the latest technologies in education and further professional activities. With regard to future lawyers, it is important not only to provide them with theoretical knowledge of digital technologies, but also to teach them how to use them in practice. Digital technologies contribute to improving the educational process, increasing its accessibility and efficiency, and prepare students to work in a digital environment, which is an important component of modern legal practice. The use of digital technologies in the training of lawyers has several key aspects, which are shown in Figure 1.

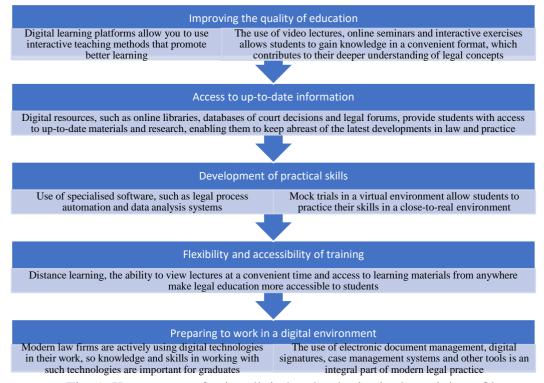


Fig. 1. Key aspects of using digital technologies in the training of lawyers

Thus, the introduction of digital technologies in the professional training of future lawyers is necessary to ensure their competitiveness in the labour market and their ability to work effectively in the modern digital

world. In the training of future lawyers, we actively use various forms of learning activities based on digital technologies that have proven to be effective (Fig. 2).

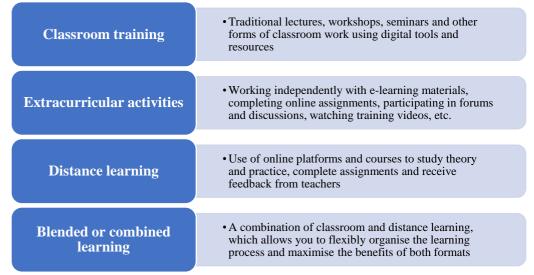


Fig. 2. Areas of implementation of digital technologies in the educational process

This diverse approach allows students to freely choose the form of study according to their needs and capabilities. The use of digital resources contributes to the interactivity and dynamism of the learning process, which has a positive impact on learning. In addition, digital technologies provide access to a wide range of learning materials, allowing students to expand their knowledge and skills. Teachers also have the opportunity to use modern tools to create more effective and interesting classes. The use of specialised software allows students to acquire

the practical skills necessary for modern legal practice. Thanks to digital tools, future lawyers can research legal precedents and prepare legal documents more efficiently.

The use of artificial intelligence in the professional training of future lawyers is quite interesting and promising, as artificial intelligence is rapidly integrating into various spheres of life, and legal practice is no exception. Lawyers use AI to improve their work efficiency, increase accuracy, and expand the scope of legal services (Fig. 3).



Fig. 3. Key features of AI use by lawyers

For example, AI can quickly identify key facts, dates, figures and other important elements in legal documents, saving lawyers time on manual search and analysis. AI can quickly search and analyse case law, laws, regulations, and other sources of information, helping lawyers find relevant arguments and support for their cases. AI can generate standard legal documents

such as agreements, letters, and contracts, saving lawyers time and making the process more efficient.

AI can help lawyers make more informed decisions by providing them with access to large amounts of data and information that can be analysed to identify patterns and trends. In particular, AI can help lawyers estimate the likelihood of success or failure in legal cases by analysing similar cases and other factors, helping lawyers identify potential problems in legal documents or transactions before they become serious problems. Furthermore, AI can help lawyers develop more effective strategies for their clients by providing them with different scenarios and forecasts.

Interesting prospects are also opening up in the area of expanding the possibilities of providing legal services. In particular, AI chatbots can provide basic legal advice and answer common questions, which can help clients solve their problems without the need to contact a lawyer, etc.

However, the use of AI in law is accompanied by a number of ethical considerations that lawyers need to take into account. These include:

- 1) bias of algorithms. AI systems can be biased, which can lead to discrimination against certain groups of people.
- 2) transparency and explanation. It is important that lawyers understand how AI systems work and can explain to their clients how these systems are used in their cases.
- 3) responsibility. It is important to clearly define who is responsible for the actions of the AI system, including any errors or damage they may cause.

Conclusion. Digital technologies are a powerful tool that helps prepare individuals for an active life in society. They allow editing, expanding and improving, making a person's social experience more meaningful. The use of modern digital technologies by future lawyers helps to create an atmosphere of cooperation, understanding and goodwill, which contributes to the development of critical thinking skills, creativity and self-realisation. The introduction of digital technologies improves the educational process, makes modern education more accessible and effective, and prepares future

professionals to work in the information society.

The use of digital tools in legal education allows students to master modern methods of research and analysis of legal documents using advanced technologies. They get the opportunity to work with large amounts of data, which develops their analytical skills and improves their professional training. In addition, technologies provide access to up-to-date legal resources and databases, which helps students keep abreast of the latest changes in legislation and case law. Teachers can use interactive teaching methods, such as online courses, webinars and virtual trial simulations, which makes the learning process more interesting and effective. As a result, future lawyers acquire the skills necessary to succeed in the modern legal environment, where digital technologies play a kev role.

In this context, we believe that experimental studies of future lawyers' readiness to effectively use digital technologies in their professional activities are promising areas for further research on this topic.

Литература.

- 1. Dembitska, S., Kuzmenko, O., Savchenko, I., Demianenko, V., Hanna, S. Digitization of the Educational and Scientific Space Based on STEAM Education. In: Auer, M.E., Cukierman, U.R., Vendrell Vidal, E., Tovar Caro, E. (eds) Towards a Hybrid, Flexible and Socially Engaged Higher Education. ICL 2023. Lecture Notes in Networks and Systems, vol 901. Springer, Cham. 2024. https://doi.org/10.1007/978-3-031-53022-7_34
- 2. Kobylianskyi, O., Stavnucha N.., Dembitska, S., Kobylianska I., K., Miastkovska, M. (2024). Innovative Learning Technologies in the Process of Training Specialists of Engineering Specialties in the Conditions of Digitalization of Higher Education. In: Auer, M.E., Cukierman, U.R., Vendrell Vidal, E., Tovar Caro, E. (eds) Towards a Hybrid, Flexible and Socially Engaged Higher Education. ICL 2023. Lecture Notes in Networks and Systems. 2024. vol 911. Springer, Cham. https://doi.org/10.1007/978-3-031-53382-2_1
- 3. Kuzmenko O., Dembitska S., Radul S. Implementation of STEM-education elements in the process of teaching professional subjects in technical institutions of higher education. Modern approaches to knowledge management development. Collective monograph. Ljubljana, Slovenia, 2020. P. 85–95.
- 4. Kuzmenko, O., Dembitska, S., Miastkovska, M., Savchenko, I., Demianenko, V. Onto-oriented Information Systems for Teaching Physics and Technical Disciplines by STEM-environment. *International Journal of Engineering Pedagogy*. 2023. №.13 (2). pp. 139-146. DOI: 10.3991/ijep.v13i2.36245
- 5. Kuzmenko, O., Rostoka, M., Dembitska, S., Topolnik, Y., Miastkovska, M. Innovative and Scientific ECO Environment: Integration of Teaching Information and Communication Technologies and Physics. Lecture Notes in Networks and Systems, 390 LNNS. 2022. pp. 29-36. DOI: 10.1007/978-3-030-93907-6_4
- 6. Puhach S., Dembitska S., Kobylianskyi O. Improvement of professional training of technical specialists according to requirements of integration methodological approach. *Науково-методичний журнал «Нова педагогічна думка»*. 2022. № 3(111). P. 14–23.
- 7. Дембіцька С. В., Кобилянський, О. В., Максименко, Ю. Л., Пінаєва, О. Ю. Шляхи забезпечення міжпредметної інтеграції у професійній підготовці майбутніх фахівців технічних спеціальностей. Інтеграція в європейській освітній простір: діалог зі стейкхолдерами: монографія. Вінниця: ТОВ «Друк», 2022. С. 194–217.
- 8. Дембіцька С., Кобилянська І. Вдосконалення професійної підготовки фахівців технічних спеціальностей в контексті інноваційного розвитку вищої освіти. Актуальні аспекти розвитку STEAM-освіти в умовах євроінтеграції: збірник матеріалів Міжнародної науково-практичної інтернет-конференції (м. Кропивницький, 21 квітня 2023 року). Кропивницький: ДонДУВС. 2023. С. 347–348.
- 9. Дослідження цифрової грамотності в Україні. (2023). М-во цифр. трансформації України. Відновлено з https://osvita.diia.gov.ua/uploads/1/8740-cifrova gramotnist naselenna ukraini 2023 compressed.pdf
- 10. Квітка С. Вплив цифрових технологій на професійну підготовку публічних службовців у контексті цифрової трансформації в музейній справі. Аспекти публічного управління. 2023. Т.11, № 4. С. 47-54. DOI: https://doi.org/10.15421/152352
- 11. Костецька О. П. Цифрові технології в освіті. Сучасні інформаційні технології та інноваційні методики навчання: досвід, тенденції, перспективи: матеріали ІІ міжнародної науково-практичної інтернетконференції з нагоди святкування 30-річчя кафедри інформатики та методики її навчання. 8–9 листопада 2018. Тернопіль: ТНПУ ім. В. Гнатюка, 2018. С. 208–210. Kostetska, O. P. (2018). Tsyfrovi tekhnolohii v osviti [Digital Technologies in education]. Ternopil, Ukraine.
- 12. Кузьменко О. С., Дембіцька С. В. Формування STEM-компетентностей студентів під час розв'язування фізичних задач з поєднанням принципу симетрії в вищих технічних навчальних закладах. Збірник наукових праць Кам'янець-Подільського національного університету імені Івана Огієнка. Серія педагогічна. 2019. № 23. С. 20–22.
- 13. Куйбіда, В. С., Карпенко, О. В., & Наместнік, В. В. (2018). Цифрове врядування в Україні: базові дефініції понятійно-категоріального апарату. Вісник Національної академії державного управління при Президентові України. Серія : Державне управління. 2018. № 1. С. 5-10.

References

- 1. Dembitska, S., Kuzmenko, O., Savchenko, I., Demianenko, V., Hanna, S. Digitization of the Educational and Scientific Space Based on STEAM Education. In: Auer, M.E., Cukierman, U.R., Vendrell Vidal, E., Tovar Caro, E. (eds) Towards a Hybrid, Flexible and Socially Engaged Higher Education. ICL 2023. Lecture Notes in Networks and Systems, vol 901. Springer, Cham. 2024. https://doi.org/10.1007/978-3-031-53022-7_34
- 2. Kobylianskyi, O., Stavnucha N., Dembitska, S., Kobylianska I., K., Miastkovska, M. (2024). Innovative Learning Technologies in the Process of Training Specialists of Engineering Specialties in the Conditions of Digitalization of Higher Education. In: Auer, M.E., Cukierman, U.R., Vendrell Vidal, E., Tovar Caro, E. (eds) Towards a Hybrid, Flexible and Socially Engaged Higher Education. ICL 2023. Lecture Notes in Networks and Systems. 2024. vol 911. Springer, Cham. https://doi.org/10.1007/978-3-031-53382-2_1
- 3. Kuzmenko O., Dembitska S., Radul S. Implementation of STEM-education elements in the process of teaching professional subjects in technical institutions of higher education. Modern approaches to knowledge management development. Collective monograph. Ljubljana, Slovenia, 2020. R. 85–95.
- 4. Kuzmenko, O., Dembitska, S., Miastkovska, M., Savchenko, I., Demianenko, V. Onto-oriented Information Systems for Teaching Physics and Technical Disciplines by STEM-environment. International Journal of Engineering

Peda-gogy. 2023. №.13 (2). pp. 139-146. DOI: 10.3991/ijep.v13i2.36245

- 5. Kuzmenko, O., Rostoka, M., Dembitska, S., Topolnik, Y., Miastkovska, M. Innovative and Scientific ECO Environment: Integration of Teaching Information and Communication Technologies and Physics. Lecture Notes in Networks and Systems, 390 LNNS. 2022. pp. 29-36. DOI: 10.1007/978-3-030-93907-6_4
- 6. Puhach S., Dembitska S., Kobylianskyi O. Improvement of professional training of technical specialists according to requirements of integration methodological approach. Naukovo-metodichnij zhurnal «Nova pedagogichna dum-ka». 2022. № 3(111). R. 14–23.
- 7. Dembic'ka S. V., Kobiljans'kij, O. V., Maksimenko, Ju. L., Pinaeva, O. Ju. Shljahi zabezpechennja mizhpredmetnoï integraciï u profesijnij pidgotovci majbutnih fahivciv tehnichnih special'nostej. Integracija v evropejs'kij osvitnij prostir: dialog zi stejkholderami: monografija. Vinnicja: TOV «Druk», 2022. S. 194–217.
- 8. Dembic'ka S., Kobiljans'ka I. Vdoskonalennja profesijnoï pidgotovki fahivciv tehnichnih special'no-stej v konteksti innovacijnogo rozvitku vishhoï osviti. Aktual'ni aspekti rozvitku STEAM-osviti v umovah evrointeg-raciï: zbirnik materialiv Mizhnarodnoï naukovo-praktichnoï internet-konferenciï (m. Kropivnic'kij, 21 kvitnja 2023 roku). Kropivnic'kij: DonDUVS. 2023. S. 347–348.
- 9. Doslidzhennja cifrovoï gramotnosti v Ukraïni. (2023). M-vo cifr. transformaciï Ukraïni. Vidnovleno z https://osvita.diia.gov.ua/uploads/1/8740-cifrova_gramotnist_naselenna_ukraini_2023_compressed.pdf
- 10.Kvitka S. Vpliv cifrovih tehnologij na profesijnu pidgotovku publichnih sluzhbovciv u konteksti cifrovoï transformaciï v muzejnij spravi. Aspekti publichnogo upravlinnja. 2023. T.11, № 4. S. 47-54. DOI: https://doi.org/10.15421/152352
- 11.Kostec'ka O. P. Cifrovi tehnologii v osviti. Suchasni informacijni tehnologii ta innovacijni metodiki navchannja: dosvid, tendencii, perspektivi: materiali II mizhnarodnoi naukovo-praktichnoi internet-konferencii z nago-di svjatkuvannja 30-richchja kafedri informatiki ta metodiki ii navchannja. 8–9 listopada 2018. Ternopil': TNPU im. V. Gnatjuka, 2018. S. 208–210. Kostetska, O. P. (2018). Tsyfrovi tekhnolohii v osviti [Digital Technologies in education]. Ter-nopil, Ukraine.
- 12.Kuz'menko O. S., Dembic'ka S. V. Formuvannja STEM-kompetentnostej studentiv pid chas rozv'jazuvannja fizichnih zadach z poednannjam principu simetriï v vishhih tehnichnih navchal'nih zakladah. Zbirnik nau-kovih prac' Kam'janec'-Podil's'kogo nacional'nogo universitetu imeni Ivana Ogienka. Serija pedagogichna. 2019. № 23. S. 20–22.
- 13.Kujbida, V. S., Karpenko, O. V., & Namestnik, V. V. (2018). Cifrove vrjaduvannja v Ukraïni: bazovi defi-niciï ponjatijno-kategorial'nogo aparatu. Visnik Nacional'noï akademiï derzhavnogo upravlinnja pri Prezidentovi Uk-raïni. Serija: Derzhavne upravlinnja. 2018. № 1. S. 5-10.

Сведения об авторт

Пугач Виталина Николаевна

Лауазымы: педагогика ғылымдарының кандидаты, докторы, құқық және гуманитарлық ғылымдар кафедрасының доценті, Батыс Украина ұлттық университетінің Винница оқу-ғылыми экономика институтының доценті

Пошталық мекен-жайы: 21017, Украина, Винница, көш. Ғанти, 37

Ұялы. тел: +38 (063) 433-30-93 Пугач Виталина Николаевна

Должность: кандидат педагогических наук, доцент кафедры правоведения и гуманитарных дисциплин, доцент, Винницкий учебно-научный институт экономики Западноукраинского национального университета

Почтовый адрес: 21017, Украина, г. Винница, ул. Гонты, 37

Сот. тел: +38 (063) 433-30-93 **Puhach Vitalina Nikolaevna**

Position: Candidate of Pedagogical Sciences, Associate Professor of the Department of Law and Humanities, Associate Professor, Vinnitsa Educational and Scientific Institute of Economics, Western Ukrainian National University

Mailing address: 37, st. Gaunty, Vinnitsa, 21017, Ukraine

Mob. tel: +38 (063) 433-30-93