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**DEVELOPMENT OF THE LEARNING PROCESS MANAGEMENT
IN THE CONTEXT OF DIGITIZATION**

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Abstract

The article is devoted to the development of approaches to improving the management of the learning process in the context of digitization. The massive and ramified formal education system does not meet the needs of the labor market and is unable to form high-quality labor resources. It does not work for the autonomous well-being of citizens and significantly reduces their employment opportunities and capitalization, that is, the economy and the country, in general, are losing. Approaches, solutions, and initiatives for the development of digital literacy through academic formal education and non-formal education will differ based on their specifics. The key solution to the problem is a combined strategy, in which there are long-term measures and scales inherent in the state education system and short-term rapid measures that are more relevant for implementation in the digital education segment.

Keywords

Training – Digitization – Education – Modernization – Labor market – Strategy – Innovation

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Introduction

The most developed and successful countries in the context of global informatization of society, fierce competition, and rapid changes are directing their state policy towards the modernization of educational activities, namely, training a new generation of specialists who can compete in the modern labor market, act in non-standard situations, and adapt to the current conditions. In this context, the state faces the problem of finding effective ways and innovative approaches that will contribute to the quality training of future specialists.

One of the possible ways to solve this problem is to digitalize the educational process of higher education institutions since universities are the cells for designing the latest technologies and serve as launch pads for implementing innovations, which generally ensures the development of any areas of human activity and contributes to socio-economic growth. At the same time, the concept of "digitization" has been established relatively recently and is associated with the large-scale penetration of information and communication technologies into the daily life of modern society.

The study of learning management issues in the context of digitization is reflected in the works of E.N. Babin¹, T. E. Davydova², E.K. Karpunina³, S.K. Kuizheva⁴, I.D. Stolbova⁵, N.V. Fedorova⁶, and others. The works of these scholars raise the problem of reforming and modernizing the existing higher education system following the challenges of modern times and describe some ways to overcome the risks associated with the emergence of the phenomenon of social isolation of people who do not have sufficient knowledge of innovative technologies.

Methods

The theoretical and methodological basis of the study were: abstract-logical method, methods of induction, deduction, analysis, synthesis, systematization – to justify the approach to the identification of trends in higher education; the graphic method – to study the levels and trends of parameters of digitization development in higher education in the context of globalization.

¹ E. N. Babin, "Tsifrovizatsiya universiteta: postroenie integrirovannoi informatsionnoi sredy", *Univerity management: practice and analysis* Vol: 22 num 6 (2018): 44-54.

² T. E. Davydova, "Spetsifika organizatsii obrazovatel'nogo protsessa v universitete v nestandartnykh usloviyakh", *Organizator proizvodstva* Vol: 28 num 2 (2020): 97-107.

³ E. K. Karpunina y I. Gorchev, "'Ekonomika obshcheniya" v sisteme ekonomicheskikh otnoshenii na tsifrovom etape razvitiya", *Vestnik Tverskogo gosudarstvennogo universiteta. Seriya: Ekonomika i upravlenie* num 4 (2019): 8-17.

⁴ S. K. Kuizheva; Kh. A. Abduzhalilov y Z. D. Gasheva, "Upravlenie innovatsionnoi deyatel'nostyu vysshego uchebnogo zavedeniya posredstvom tsifrovogo razvitiya ASU vuza i elektronnoogo universiteta", *Nauchnye vedomosti Belgorodskogo gosudarstvennogo universiteta. Seriya: Ekonomika. Informatika* Vol: 46 num 4 (2019): 419-426.

⁵ I. D. Stolbova; E. P. Aleksandrova y L. V. Kochurova, "Organizatsiya upravleniya graficheskimi obrazovaniem v usloviyakh tsifrovizatsii", *Informatika i obrazovanie* Vol: 9 num 308 (2019): 47-55.

⁶ N. V. Fedorova y Yu. V. Danilchenko, "Sozdanie kompleksnykh nauchno-tekhnicheskikh programm kak osnovnogo napravleniya razvitiya obrazovaniya v usloviyakh tsifrovizatsii ekonomiki", *Nauchno-tekhnicheskoe vedomosti Sankt-Peterburgskogo gosudarstvennogo politekhnicheskogo universiteta. Ekonomicheskie nauki* Vol: 12 num 4 (2019): 115-122.

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The information base of the article was statistical data of state bodies, legislative and regulatory documents regulating the management of the higher education system in the context of digitization, evaluation of the effectiveness of regulation of the higher education system, and results of scientific research⁷.

In the course of the study, it was planned to consider options for a new learning process, justify the prospects for the development of the education system in the context of digitization, and analyze educational systems to confirm the parameters of their effective functioning.

Results

The digital revolution is taking place now, which is a multi-factor transition from analog to digital methods of processing, storing, and transmitting data and, accordingly, the rapid development of hardware and software that serves processes. These changes originate from scientific research of those innovations that, with a successful combination of socio-economic circumstances, reach industrial developments and mass adoption, as well as provide for the development of digital educational resources (Figure 1).

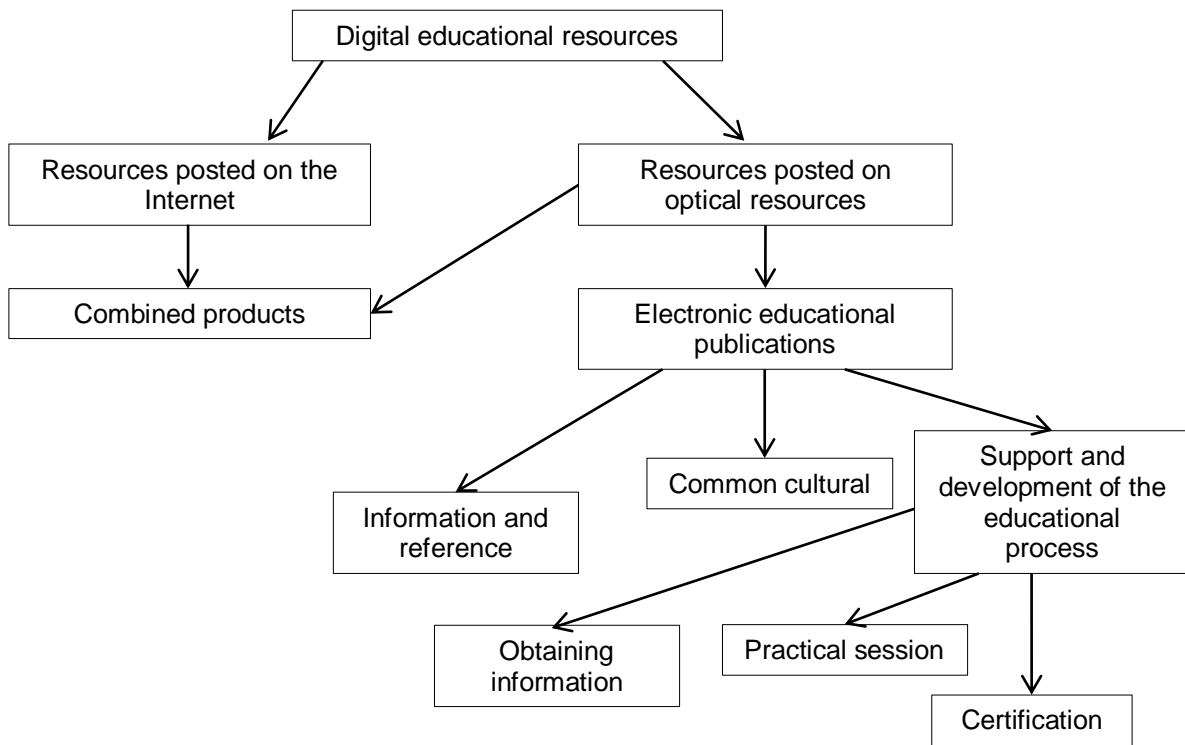


Figure 1
Digital educational resources

⁷ Ek. V. Agamirova; El. V. Agamirova; O. Ye. Lebedeva; K. A. Lebedev y S. V. Ilkevich, “Methodology of estimation of quality of tourist product”, *Quality - Access to Success* Vol: 18 num 157 (2017): 82-84; O. S. Reznikova; A. K. Ganieva; V. V. Verna; J. N. Korolenko y A. V. Shelygov, “Determinants of the Russian Labor Market Model”, *Revista Inclusiones* Vol: 7 num Especial (2020): 260-267 y N. A. Zavalko; V. O. Kozhina; A. G. Zhakevich; O. E. Matyunina y O. Ye. Lebedeva, “Methodical approaches to rating the quality of financial control at the enterprise”, *Quality - Access to Success* Vol: 18 num 161 (2017): 69-72.

Most often, digital technologies and systems are mentioned in combination with multimedia formats for presenting and processing information (for example, digital television, photo, video, and audio equipment), as well as digital communication systems. At the same time, all types of computers present and process data in digital format to varying degrees. It is digital technology that allows manipulating data at high speed, including when transmitting over analog or digital communication channels.

Computers, telecommunications, and Internet network services can process these digital data, which gets there by converting various types of analog signals. Then, this data is combined with devices and programs in new formats in digital form, yielding to the combination of different formats. At the same time, given the rapid pace of scientific and technological progress, there is a need to implement the digital revolution in the educational sector, since the modern information society requires fundamentally new approaches to obtaining a high-quality education.

In this context, it is necessary to find new means and ways to train highly qualified specialists who will know the basics of digital literacy and will be able to develop, implement, and disseminate digital education. This goal can be achieved through a well-established educational process in higher education. Taking this into account, one of the priority tasks in the direction of digitization of the educational process in higher education institutions is a clear definition of the concept of "digitization" and the definition of its main guidelines in education.

The practice has shown that digitization helps to simplify the educational process, making it more flexible, adapted to the realities of the modern-day, which in turn ensures the formation of competent professionals. Digitization in education is aimed at ensuring the continuity of the learning process, i.e. lifelong learning, as well as its individualization based on advanced learning technology, that is, the use of significant data in learning in the process of mastering certain disciplines by individual students.

The digitization of education directly depends on the level of proficiency in the digital technologies of the teacher to use them productively in educational activities. Among other things, there is a need to develop the ability to navigate the flow of digital information, work with it, process it, and integrate it into a new training technology. Therefore, the information format is based on a digital representation of information.

However, unlike the electronic format, the digital format more accurately represents information, ensuring its free circulation, placement, processing, and use in computer networks. Consequently, the digital education system includes information resources, telecommunications, and a management system. Digital technologies in the modern world are not only a tool but a living environment that opens up new opportunities: learning at any convenient time, continuing education, the ability to design individual educational routes, from consumers of electronic resources to become creators of knowledge.

Thus, digitization of education involves the use of mobile and Internet technologies by students, expanding the horizons of their knowledge, making them limitless. That is why, the productive use of digital technologies, inclusion of students in independent search, selection of information, and participation in project activities form new competencies for them.

Recently, the process of creating and applying open online resources has been actively implemented, ranging from individual tasks and tests to full-scale courses (modules) on the formation of necessary competencies. In this case, the dynamics of online learning is demonstrated by the increasing availability of online courses. Among other things, additional areas of application of digitization in education are aimed at the development of digital libraries and university campuses.

Research shows that the development and content of an online course are carried out using software solutions that allow forming the course from available information resources and in specialized software environments, author's systems, and automated design. The education system, using new technological tools and unlimited information resources, should strive to effectively implement them in the educational process.

However, the practice of online courses and blended learning creates a field of unlimited educational opportunities, focusing on the quality of education for each person, regardless of their place of residence and skills, but following their interests and capabilities. Such changes require the teacher to be fluent in the digital educational environment. It follows that a promising task for all universities is to improve the skills of teachers in digital literacy, focused not only on the development of courses but also on the use of the digital environment in the educational process.

The digital environment requires teachers to have a different mentality, worldview, better ways and forms of working with students, as well as digital literacy, which refers to the ability to create and apply content using digital technologies, including computer programming, search, information exchange, and communication skills. Elements of digital literacy include understanding the cultural context of the Internet environment and the ability to communicate in online communities and create and distribute content.

The content of digital literacy comes down to the understanding that if there is clarity in the structure and content of digital reality, then there will be clarity in the control and interaction with digital technologies. At the same time, digitization management in the educational environment is carried out through digital marketing, aimed at organizing interaction with educational support, research, and teaching staff, graduates, students, and applicants using a range of digital communication channels, as well as monitoring changes in the formation of a positive image of the university.

Currently, every higher education institution, regardless of the chosen strategy, faces the task of undergoing a digital transformation, which involves the introduction of more flexible processes, changing the corporate culture, and optimizing processes. This transition is due to several factors. Firstly, almost all students demonstrate a much greater propensity to apply new technologies in their daily lives. This is especially true for Internet technologies, as well as their application not only in the professional sphere but also for socialization and communication.

Thus, the digitization of a university will make it more suitable for the target audience. This will increase the competitiveness of higher education institutions in the education market, create additional value, and attract students. The second argument is the growing competition among higher education institutions, especially top universities. Therefore, given the globalization of the market, the struggle for students will take place using the model of educational process management in the context of digitization (Figure 2).

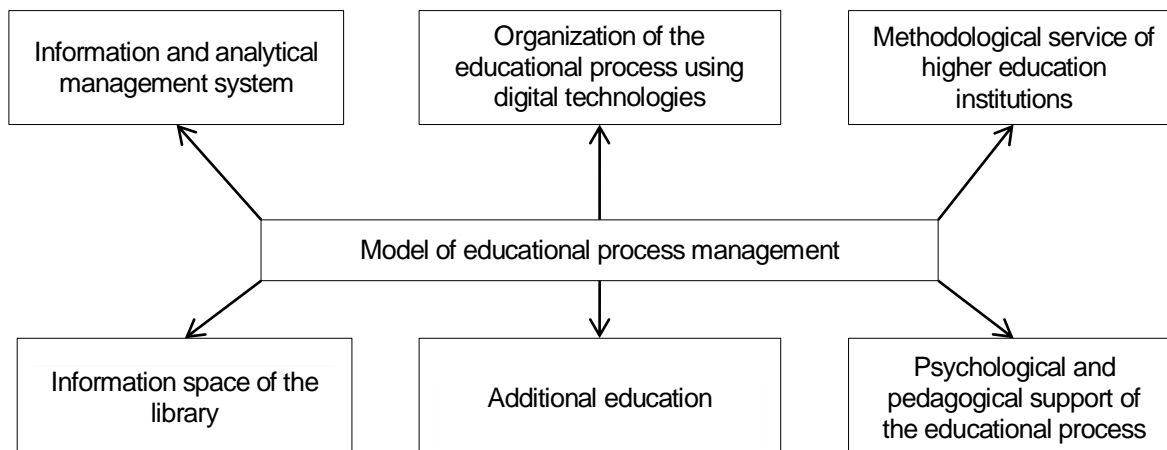


Figure 2

Model of educational process management in the context of digitization

The creation and maintenance of competitive advantage of a university will be determined by the timeliness of the introduction of new technologies and, as a result, readiness for fundamental changes in the direction of the new generation of education systems. The third argument follows from the need to digitalize the internal processes of a university to increase the efficiency of interaction between departments at the level of the entire educational institution.

All this is necessary for all the innovative and cultural transformations that are required of a university in the transition to a new educational model. In this case, the main goal of any higher education institution that seeks to develop is to focus all efforts on automating processes within the university, which will make them more effective by redistributing resources in the real and virtual environment.

Therefore, it is possible to formulate the main tasks of digitization that should be set for higher education institutions: providing training and advanced training of university teaching staff on the use of digital technologies in educational activities; implementing digital technologies in the educational process; providing opportunities for collective use of digital resources and free access to them in cloud services; ensuring an increase in the level of motivation for professional use of digital technologies by teachers and students; creating innovative conditions for development through the introduction of digital technologies; providing information and consulting services on the use of digital and cloud technologies with unlimited resources; accumulating, systematizing, and distributing information on the use of digital technologies and cloud technologies by a higher education institution.

By completing these tasks, the education system will be able to provide society with a confident transition to the digital age, which is focused on improving the productivity of the educational process, building individual learning routes, and managing their learning outcomes, virtual and augmented reality. It is worth noting that digital resources used in everyday activities allow overcoming the barriers of traditional learning: the pace of development of the program, the choice of the teacher, forms, and methods of teaching.

In addition, information, communication, and digital technologies provide an opportunity to intensify the educational process and improve the level and quality of perception, understanding, and assimilation of knowledge. Using media and interactive tools, it is easier for teachers to use an approach to teaching based on the introduction of innovative approaches, including the use of

"cases", experimental search work, and business games. As a result, students learn information much better and develop appropriate skills, being in an emotionally comfortable environment, and do not lose the desire to learn, generate ideas, and create.

Discussion

The reliability of the presented approaches is confirmed by the fact that digital technologies make the educational process mobile, differentiated, and individual. However, they do not replace the teacher but complement them harmoniously. Classes based on the use of digital technologies are characterized by adaptability, manageability, interactivity, a combination of individual and group work, as well as time-bound learning⁸.

Digital technologies provide several new opportunities for both teachers and students, in particular: getting satisfaction from the exciting process of communication and learning; automating most of the teaching work, freeing up time for search, communication, self-improvement, individual work with students; providing feedback; putting students with poor training in the role of a leader, which generally contributes to the success of the entire academic group; correcting the individual development of future specialists; improving the effectiveness of managing the educational process and education in general.

The main directions of digitization of higher education are the creation of educational resources and digital platforms with support for interactive and multimedia content for general access of higher education institutions and students, in particular, tools for automating the main processes of higher education; development and implementation of innovative computer, multimedia, and computer-oriented learning tools and equipment for creating a digital learning environment (multimedia classes, research laboratories, inclusive groups, blended learning groups); organization of free Internet access for students in the classrooms of higher schools; development of distance education using cognitive and multimedia technologies.

Conclusion

In conclusion, the massive and ramified formal education system does not meet the needs of the labor market and is unable to form high-quality labor resources. It does not work for the autonomous well-being of citizens and significantly reduces their employment opportunities and capitalization, that is, the economy and the country, in general, are losing. Regarding the commercial segment, the situation is somewhat better, since more modern methods are used here, and the technical support and motivational component of teachers are much higher.

Approaches, solutions, and initiatives for the development of digital literacy through academic formal education and non-formal education will differ based on their specifics. Thus, the provider of training services in the first segment is the state and in the second – commercial companies. Meanwhile, a key solution to the problem could be a combined

⁸ I. N. Lukiyanchuk; S. V. Panasenko; S. Yu. Kazantseva; K. A. Lebedev y O. E. Lebedeva, "Development of online retailing logistics flows in a globalized digital economy", *Revista Inclusiones* Vol: 7 num S2-1 (2020): 407-416; E. V. Ogloblina; M. I. Seredina; J. O. Altunina; V. A. Kodolov y K. A. Lebedev, "Socio-economic consequences of digital development of the economy", *Revista Inclusiones* Vol: 7 (2020): 421-430 y A. V. Shelygov; P. N. Sharonin y E. B. Tretyak, "The Early Fields of Thought in Change Management", *Journal of Economy and entrepreneurship* Vol: 7 num 108 (2019): 185-190

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strategy, in which there are long-term measures and the scale inherent in the state education system and short-term quick measures, which are more relevant for implementation in the digital education segment.

References

Agamirova, Ek. V.; Agamirova, El. V.; Lebedeva, O. Ye.; Lebedev, K. A. y Ilkevich, S. V. "Methodology of estimation of quality of tourist product". Quality - Access to Success Vol: 18 num 157 (2017): 82-84.

Babin, E. N. "Tsifrovizatsiya universiteta: postroenie integrirovannoi informatsionnoi sredy". University management: practice and analysis Vol: 22 num 6 (2018): 44-54.

Davydova, T. E. "Spetsifika organizatsii obrazovatel'nogo protsessa v universitete v nestandartnykh usloviyakh". Organizator proizvodstva Vol: 28 num 2 (2020): 97-107.

Fedorova, N. V. y Danilchenko, Yu. V. "Sozdanie kompleksnykh nauchno-tekhnicheskikh programm kak osnovnogo napravleniya razvitiya obrazovaniya v usloviyakh tsifrovizatsii ekonomiki". Nauchno-tekhnicheskie vedomosti Sankt-Peterburgskogo gosudarstvennogo politekhnicheskogo universiteta. Ekonomicheskije nauki Vol: 12 num 4 (2019): 115-122.

Karpunina, E. K. y Gorchev, I. "Ekonomika obshcheniya" v sisteme ekonomicheskikh otnoshenii na tsifrovom etape razvitiya". Vestnik Tverskogo gosudarstvennogo universiteta. Seriya: Ekonomika i upravlenie num 4 (2019): 8-17.

Kuizheva, S. K.; Abduzhalilov, Kh. A. y Gasheva, Z. D. "Upravlenie innovatsionnoi deyatelnostyu vysshego uchebnogo zavedeniya posredstvom tsifrovogo razvitiya ASU vuza i elektronnoho universiteta". Nauchnye vedomosti Belgorodskogo gosudarstvennogo universiteta. Seriya: Ekonomika. Informatika Vol: 46 num 4 (2019): 419-426.

Lukiyanchuk, I. N.; Panasenko, S. V.; Kazantseva, S. Yu.; Lebedev, K. A. y Lebedeva, O. E. "Development of online retailing logistics flows in a globalized digital economy". Revista Inclusiones Vol: 7 num S2-1 (2020): 407-416.

Ogloblina, E. V.; Seredina, M. I.; Altunina, J. O.; Kodolov, V. A. y Lebedev, K. A. "Socio-economic consequences of digital development of the economy". Revista Inclusiones Vol: 7 (2020): 421-430.

Reznikova, O. S.; Ganieva, A. K.; Verna, V. V.; Korolenko, J. N. y Shelygov, A. V. "Determinants of the Russian Labor Market Model". Revista Inclusiones Vol: 7 num Especial (2020): 260-267.

Shelygov, A. V.; Sharonin, P. N. y Tretyak, E. B. "The Early Fields of Thought in Change Management". Journal of Economy and entrepreneurship Vol: 7 num 108 (2019): 185-190.

Stolbova, I. D.; Aleksandrova, E. P. y Kochurova, L. V. "Organizatsiya upravleniya graficheskim obrazovaniem v usloviyakh tsifrovizatsii". Informatika i obrazovanie Vol: 9 num 308 (2019): 47-55.

Zavalko, N. A.; Kozhina, V. O.; Zhakevich, A. G.; Matyunina, O. E. y Lebedeva, O. Ye. "Methodical approaches to rating the quality of financial control at the enterprise". Quality - Access to Success Vol: 18 num 161 (2017): 69-72.

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