

Advances in Economics, Business and Management Research, volume 81 1st International Scientific Conference "Modern Management Trends and the Digital Economy: from Regional Development to Global Economic Growth" (MTDE 2019)

Reculiarities of digitalization of educational process in educational organizations in Russia

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Abstract — This article discusses approaches to the digitalization system of the educational process in Russian universities (using the example of the Oryol Law Institute of the Russian Ministry of Internal Affairs named after VV Lukyanov), the problems of introducing digital technologies and their possible implementation are analyzed. The time requirements for changing the use of digital tools in the training of students are considered. The importance of digitalization in the organization of employee training in modern conditions is revealed, since it is constantly changed in accordance with the requirements of modern society. The tasks of digitalization, which are assigned to the higher school are denoted. The measures for the further digitalization of the learning process in institutions of higher professional education are formulated.

Keywords — educational process, higher school, digitalization, vocational education, digital technologies, digital environment.

I. INTRODUCTION

Today, the educational space is rapidly growing and expanding due to the development of the digital environment: electronic textbooks are being created, educational platforms are emerging and developing, the number of open mass online courses is measured in thousands, and the number of their consumers is in the millions. Distance education is already firmly established in our lives.

Modern technologies are being confidently introduced into our lives, the concept of "Digitization" can be heard not only at scientific conferences, but also in everyday life. While some people are still arguing about the merits or demerits of the digitalization process, in many states the trend towards introducing modern technologies [1] is becoming commonplace for us keep up with. Digitalization involves the full automation of the processes and stages of production, starting with product design and ending with its delivery to the final consumer, as well as the subsequent maintenance of the product [2].

The basis for the initiation and implementation of digitalization of education are: Federal Law of December 29, 2012 No. 273- FZ (Federal Law) "About the Education in the

Russian Federation", the state program of the Russian Federation "Development of Education" for 2013-2020. From regulatory documents, the goal of digitalization of vocational education should be to ensure the wide accessibility to information digital resources and the use of digital technologies in the educational process in Russian universities.

According to A.A. Ivashkina modern activity of an educational organization largely depends on the degree to which teachers use digital technologies and digital information, how quickly they can independently or with the usage of information technologies analyze and process this information, and bring it to the target user - the student [3].

We consider several approaches to understanding digitalization. Today, "digitalization" (from English digital) can already be entered into dictionaries as a homonym because of the large number of meanings. The education system should provide society with a confident transition to a digital era being focused on productivity growth, new types of work, and human needs [4]. In other words, digitalization is what is required to make the education process more flexible, adapted to the realities of the modern time and contributes to the formation of competitive professionals in the emerging "digital world".

"Digitalization" is a means of obtaining the needed result, in other words, the flexibility of the educational process, which gives the future employee an excellent result, and organizations of various profiles are given highly qualified mobile professionals. "Digitalization is the transition to a digital method of communication, recording and transmitting data using digital devices" [4].

The process of "digital transformation" is the process of transferring a process to a "flexible" state from an existing one [5].

The term "digitalization" today tends to be used to describe a transformation that goes further than simple replacing an analogous or physical resource with a digital one. For example, books do not just turn into e-books, but provide a whole range of interactive and multimedia resources.



Accordingly, processes can become even online dialogues between various parties of the educational process. Digitalization is a change in the concept of thinking in the interaction of a person with a person, with the outside world through a new tool.

II. METHODOLOGY OF RESEARCH

In the context of the development of an educational institution (on the example of an educational organization of the Ministry of Internal Affairs of Russia), digitalization should be implemented on integrating of automation and providing various kinds of processes in order to ensure its efficiency through the redistribution of resources in the real and virtual environment of an educational organization. Focusing on digitization involves obtaining higher performance from these processes (including the method of providing educational services).

Achieving the goals is possible by formulating the tasks on the application of digitalization, which should be set before any an educational organization in Russia, namely:

1) training and raising the level of skills of university teachers in the use of digital technologies in educational activities (for example, the development of basic educational programs for raising qualifications with the possibility of using a system of distance learning technologies);

2) implementation of digital technologies in the educational process;

3) providing for the collective usage of digital opportunities and access to them in cloud resources;

4) ensuring the increase of the level of motivation for the professional use of digital technologies by the teaching staff and students;

5) creation of innovative conditions for development through the introduction of digital technologies;

6) providing information and consulting services on the use of digital and cloud technologies with unlimited resources;

7) accumulation, systematization and dissemination of information on the use of digital and cloud technologies.

To accomplish the tasks mentioned above, it is necessary to understand the existing state of informatization at the educational organization using the example of the Oryol Law Institute of the Ministry of the Interior of the Russian Federation named after V.V. Lukyanov.

III. THE RESULTS OF RESEARCH

During a period of more than 40 years, this educational organization has undergone a transformation, during this period information and communication technologies (ICT) have been introduced. Today there are no audiences that haven't been equipped with multimedia equipment, a computer (laptop), there are computer specialized audiences, and the library has a constant access to various information resources, such as:

• ConsultantPlus [Electronic resource]: legal reference system: database / Regional Information Center of the All-Russian Network for Dissemination of Legal Information "ConsultantPlus". - Access mode to full texts from the institute's local network; STRAS "Lawyer" [Electronic resource]: specialized geographically distributed automated systems: database / Register center STRAS "Lawyer". - Access mode to full texts from the institute's local network;

• information and educational portal of the Oryol Law Institute of the Ministry of the Interior of the Russian Federation named after V.V. Lukyanov [Electronic resource]: site. Access mode: http: // portal.orui.ru, from the local network of the Institute, free;

• the electronic library system of Oryol Law Institute of the Ministry of the Interior of the Russian Federation named after V.V. Lukyanov [Electronic resource]: site. - Access mode: http://liborui.ru, free, to full texts after authorization;

• IPRbooks [Electronic resource]: electronic library system: site. - Access mode: http://www.iprbookshop.ru after authorization.

These resources are available for using by students during self-preparation period. There is a touch electronic terminal, electronic boards, classes for distance education with the access to the Internet. There is a television in the main building to inform the participants of the educational process.

A modern informational, and expected in the long term as digital, environment of educational activity is formed:

- by the state as a public institution,
- by the Ministry of the Interior of the Russian Federation,
- by regulatory legal documents regulating the educational process in the university of the Ministry of Internal Affairs,
- by educational programs,
- by students,
- by the stuff of the institute.

Today, the electronic library system (more than 1000 editions) and the legal information system Consultant, are being widely implemented. The electronic library is constantly updated with new editions. This happens especially active in the period of preparation for accreditation and licensing of educational programs for new and updated Federal State Educational Standards.

Electronic digital resources in the form of interactive simulators and training systems is another direction for replenishing the digital information space at the educational organization of the Ministry of Internal Affairs of Russia.

For example, in order to use interactive technologies in the educational process, a guidance paper was developed and tested for conducting a practical lesson on the topic "Legal status and organization of activities of the duty units of internal affairs bodies" for vocational training (professional training) of middle and senior commanders, for the first time employed in the internal affairs bodies (employees of operational units) (on the basis of higher non-juridical education) on the position "Police officer" providing the use of interactive whiteboard and General Automatic Information System " Police Dispatch Center", as well as an electronic device "Document Camera". The implementation of this



guidance paper makes it possible to develop practical skills among the students by simulating the situation of the on-duty part of the territorial body of the Ministry of Internal Affairs of Russia at the district level and to work out an algorithm for managing power units and police units (Railway police units, riot squads, investigative group, etc.) when receiving statements and messages of citizens about crimes, administrative offenses and other incidents.

IV. THE DISCUSSION OF THE RESULTS

As Yaroslav Kuzminov, a Russian economist, public figure, founder and rector of the National Research University "Higher School of Economics", presented in an interview: "... the main trend today is connected with the digital revolution, which should lead to a fundamental change in the labor market, the emergence of new competencies, cooperation, increasing the responsibility of citizens, their ability to make independent decisions, in turn, this will be the reason for the possible subsequent reorganization of the education process is largely based on the use of artificial intelligence technologies "[6].

All this "will lead to a rethinking of the role of the teacher himself, who now will not have to explain this or that material, but he helps to find the source of this material and understand it, with a benefit for his own professional development. A radical revolution is also awaiting teaching methods and a system for testing the quality of knowledge."

Probably, it makes no sense today to fight with the usage and the influence of gadgets, to limit the possibilities of using the Internet for solving various tasks of vocational education. "The way out is completely different - it is necessary to develop individual educational trajectories and invent for each student their own, unique set of tasks, the answer to which will require creativity, the ability to compare, weigh, analyze, screen out unnecessary, communicate and so on" [6].

Informatization of education has created a base for the transition to a new level, digitalization is aimed at training specialists who are sure to be in demand, who easily and fluently use mobile and Internet technologies, and they also are focused on continuous learning (advanced training) through e-learning.

Formation of ideas about the educational environment in conjunction with some other environments has become possible as a result of informatization and computerization of society, in particular, stronger interaction of various educational systems, manifested in increased information flows, exchanges between students and teachers, etc. [7].

The digital environment requires teachers of a different mentality, perception of the picture of the world, completely different approaches and forms of work with students. The teacher becomes not only a source of knowledge that he shares with the students, but also a guide through the digital world. He must have digital literacy, the ability to create and apply content through digital technologies, including computer programming skills, search, information sharing.

V. CONCLUSION

Key activities in introduction of digitalization at the educational organization are:

- 1) Professional development and retraining of higher school personnel (with the development of digital technologies).
- Introduction of digital and cloud technologies into the educational and educational process (solving the tasks of systematization and planning of such activities as admission, personnel, educational process, methodical and educational work, maintaining a professional portfolio.)
- 3) Creating resources with open access on digital and cloud resources.

As recommendations it is possible to consider the following activities:

- integration of the Electronic Journal and the Electronic Attendance Accounting System;
- expanding the availability of information in different buildings of the educational organization through the use of dashboards (for timetables, announcements, information about events), software solutions;
- further updating of the electronic library with current editions of publications;
- partial transferring of midterm attestation and continuous assessment in electronic digital format, and accordingly the creation of electronic content in all disciplines and modules of the curriculum.

Undoubtedly, further digitalization should provide an increase in the quality of education, since it is possible to increase the amount of resources available significantly for using it in the educational process.

References

- Ch. Pimmer, F. Brühlmann, and A.J. Ajuwon, "Facilitating professional mobile learning communities with instant messaging," Computers & Education", vol. 128, 2019, pp. 102-112.
- [2] M.S. Kudlayev, "Protsess tsifrovizatsii obrazovaniya v Rossii" Molodoy uchenyy, vol. 31, 2018, pp. 3-7. URL: https://moluch.ru/archive/217/52242/ (data obrashcheniya: 17.02.2019).
- Tsifrovizatsii obrazovaniya vnedreniye v obrazovatel'nyy protsess [Elektronnyy resurs]. URL // https://infourok.ru (Data obrashcheniya 23.02.2019).
- [4] B.R Sanchez, M.C. Mallado and P.R. Gonzalez-Pinal, "Cambios pedagogicos y sociales en el uso de las TIC U-learning y U-portafolio," Revista Electronica de Investigacion y Docencia (REID), vol. 10, 2013, pp. 7-20. URL: https://revistaselectronicas.ujaen.es/index.php/reid/article/view/989/816 (Data obrashcheniya 20.02.2019).
- [5] T.V. Nikulina and Ye.B. Starichenko, "Informatizatsiya i tsifrovizatsiya obrazovaniya: ponyatiya, tekhnologii, upravleniye," Pedagogicheskoye obrazovaniye v Rossii, vol.8, 2018, pp. 107-113.
- [6] Osnovnoy trend v obrazovanii eto tsifrovaya revolyutsiya [Elektronnyy resurs]. URL: https://www.hse.ru/ (Data obrashcheniya 20.02.2019).
- [7] V.A. Kastornova and D.A. Dmitriyev, "Informatsionno-obrazovatel'naya sreda kak osnova obrazovatel'nogo prostranstva," Vestnik Samarskogo gosudarstvennogo tekhnicheskogo universiteta. Seriya: Psikhologopedagogicheskiye nauki, vol. 2(18), 2012, pp. 83-90.