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TRAINING STAFF FOR INDUSTRIAL AGRICULTURE IN THE CONTEXT OF DIGITALIZATION OF EDUCATION

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Ключевые слова: инновационное развитие, цифровизация, образовательный процесс, цифровые компетенции, предприятия, промышленное сельское хозяйство
Key words: innovative development, digitalization, educational process, digital competencies, enterprises, industrial agriculture

Аннотация: В данной статье анализируется инновационное развитие образования для предприятий промышленного сельского хозяйства в контексте цифровизации. Описывается внедрение цифровых инструментов в образовательный процесс, уровень использования информационных технологий в высших учебных заведениях и овладение цифровыми компетенциями. Проанализированы современные тенденции информатизации образования, преимущества и недостатки современного образования. От-

мечена оптимизация образовательного процесса за счет использования инновационного подхода к созданию необходимой цифровой структуры.
Summary: This article analyses innovative development of education for enterprises of industrial agriculture in the context of digitalisation. The introduction of digital instruments into the educational process, the level of use of information technology in higher education institutions, and mastering digital competencies are described. Modern trends in education informatisation, modern education advantages and weaknesses are analysed. The optimisation of the educational process by using an innovative approach to the development of the required digital structure is noted.

The modern-day world development is inextricably linked with its digitalisation. New technologies that regularly appear now not only affect narrow fields of science and social life but are also being introduced into everyday activities, helping to optimize them and make them more effective. There is a rapid transition of the society to the next stage, Industry 4.0, or to the information society. The Internet of Things and the wearable Internet become regular features, businesses are digitalised, and business processes are being automated.

It is obvious that companies and specialists that do not meet the conditions and requirements are forced to rebuild in order to achieve success. The use of information technologies should be a part of the lives of future industrial agriculture specialists even at the stage of the formation of their professional competencies, since digital literacy and digital culture are no longer options – digital competencies have become a necessity not only for achieving professional success but also for living in modern society as a whole.

The introduction of digital instruments into education in Russian universities shows the impact of the process of society's informatization on education. The origins of the process cannot be classified as balanced; it varies depending on the region and level of its development, but the COVID-19 pandemic demonstrated the flexibility of the higher education system in Russia under conditions of variability in the situation in a country and in the world in general; during that period, the forced transition to digital technologies due to the epidemiological situation was sufficiently effective, ensuring the continuity of education and its resilience [5].

It should be noted that the pandemic period showed not only the advantages of the existing education system but also its weaknesses, such as:

- lack of a convenient online platform for distance learning;
- lack of teachers with the necessary technical and pedagogical skills to integrate digital technologies into the learning process;
- increased time and labour costs for preparing and conducting classes using digital technology;
- lack of proper control over student engagement during classes and evaluation of their work;
- inconvenience of conducting an online exam session [6].

Developing education in a digital environment must not only address these challenges but also create an accessible environment for educating citizens in information technology and take an innovative approach to building the necessary digital infrastructure. In developing personal potential, the development of the possible personalisation of educational trajectory in the form of an individual trajectory of formation of competencies is discussed.

During the digitalisation of education, we should not forget about teachers, as they largely determine effectiveness and richness of education. The degree of comfort and "smoothness" of the educational process for them and for students depends on the process of their professional training and retraining. Thus, close attention should be paid to the education of teachers as well; digital competences of teaching staff should be updated and perfected; they should be ready for dynamic development of digital transformations and be able to adapt to new conditions fast and effectively [4].

Therefore, the development of the economy is not possible without the development of human capital of specialists working in different areas. The modern staff of an organisation should be flexible, susceptible to changes, and able to adapt to new conditions fast. The employers are no more interested in hiring industrial agriculture workers with narrow specialisation, every employee should nowadays have certain skills in the field of digital technologies, not only for implementing digital activities but also for communicating with the help of internet technologies, searching for the information they need, and working with software tools to optimise their activities.

The institution which is the most interested in developing education, staff, and consequently, economy, is the State.

The strategy for achieving digitalisation of education is fixed at the legislative level by the Russian Government Decree of 14 May 2021 № 729 "On Measures to Realize the Programme of Strategic Academic Leadership 'Prioritet-2030'." The essence of this decree is to use the full scientific and innovative potential of universities, to enhance the scientific and technological potential of the Russian universities for creating new technologies, branches of industry and viable products [1], which contributes to the expansion of international cooperation and provides staff to the most important branches of science and economy. Special attention is paid to preparing staff for agriculture because the Strategy for Scientific and Technological Development of Russia, approved by the Presidential Decree of 28 February 2024 № 145 [2], in accordance with pt. 21 names research on transition to highly productive and environmentally friendly agri- and aquacultural projects, development and implementation of systems for the rational use of means of chemical and biological protection of agricultural plants and animals, storing and effective processing of agricultural products, and development of safe and high-quality, including functional, food products as the main priorities of scientific and technical development.

The universities participating in this transformation programme get grants from the State to make the necessary reforms and to develop all the conditions needed for digitalisation. It is important to note that about 60% of participating universities are regional, i.e., they are not located in large cities, such as Moscow or Saint Petersburg, which lets you stop the outflow of students from regions, reduce the load on universities of the largest cities and provide high-quality, decent education for students from all the regions of Russia that would make them demanded employees for the labour market and for the development of the national economy.

Nowadays, the system of higher education, not only in Russia but in the entire world, is facing a global goal for development as part of the digitalization of the world. Higher education is slow to react to dramatic changes in the global economy and the labour market; universities with sufficient funding, having some freedom of action, are flexible enough in their reactions. The coronavirus pandemic demonstrated that, when urgently needed, the educational system could generally adapt to life with information technologies, but this period also revealed many of the system's "gaps" which were previously not visible. For that reason, the development of education in the context of digitalisation is related not only to the need to neutralise negative aspects but also to training the personnel the modern flexible digital economy needs. With a seemingly high degree of distancing between student and teacher during the distance learning process, the digital approach makes it possible to make the process more personalised and to develop the student's personality more effectively in a multi-faceted way. The educational process' multifaceted nature also suggests the continuous retraining of teaching staff according to appearing new formats and ways of studying.

As the development of the State's digital economy is directly dependent on human resources in the labour market, universities play an important role in training specialists with the required digital competencies. For this purpose, the State implements the "Prioritet-2030" programme. Special attention is being paid to the development of staff training for industrial agriculture as a priority of the scientific and technical development of the country.

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