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USE OF DIGITAL AVATARS IN THE LEARNING PROCESS AS A FACTOR OF ECONOMIC EFFICIENCY

The logical continuation of the digitalization process in the educational environment is the integration of all information technologies that contribute to the formation of a comprehensive view of digital educational tools. Such integration "adapts" digital avatars as intelligent media capable of interacting with the user in the learning process.

The concept of digital avatars is based on numerical modeling, which makes it possible to predict their effectiveness in the learning environment, analyze the impact of various factors on the quality of educational content, and provide personalized interaction with users [1; 2].

The proper use of this approach allows not only to work with primary educational data, but also to manage the learning process itself – to analyze the current level of students' knowledge, predict their progress in the long term, identify learning difficulties, and implement corrective measures in a timely manner. This is especially true for industries that require deep theoretical and practical knowledge, in particular technical, medical, and engineering specialties.

It is important to note that digital avatars make it possible to control both the main and auxiliary learning processes. This contributes to the effective organization of educational activities through a harmonious combination of control and improvement functions, which is manifested in the timely adjustment of educational material, elimination of errors, and adaptation of content to the needs of students [3, p. 67]. Moreover, digital avatars allow to accumulate data on learning progress, which makes it possible to analyze the effectiveness of educational methods and improve programs based on the collected statistics.

The concept of digital avatars allows to consider a set of different factors that are interconnected, which makes the educational process more adaptive and effective. The key features of digital avatars include the following:

– forecasting and modeling of educational processes, which contributes to the timely identification of gaps in students' knowledge and adjustment of educational materials;

– the possibility of using new technologies, which allows processing and accumulating large amounts of educational data, analyzing student performance in real time;

– adaptation to the real parameters of the learning environment, which makes it possible to assess the level of student engagement in the learning process and to anticipate possible difficulties in learning the material;

– flexibility and sustainability of models, which makes digital avatars an effective element of interactive education [4; 5].

The decision-making process is key in education, so the possibility of optimizing it with the help of digital avatars is a promising and necessary direction for the development of the education sector.

It is important to note that digital avatars are not inferior to traditional teaching methods in terms of the quality of knowledge transfer, and in many aspects even surpass them. They provide access to the actual characteristics of the learning process, allow predicting risks, adapting educational strategies to the individual needs of students, and taking into account the specifics of different educational disciplines [6, p. 259]. The implementation of such innovative models contributes to a significant increase in the efficiency of the learning process, optimization of educational resources, and the formation of new added value in the educational sector.

Thus, we can talk about the concept of digital avatars as a promising tool not only for improving the educational process, but also for making strategic decisions in educational and research institutions. The use of this technology allows not only to optimize learning, but also to create your own models that meet the specific educational needs and training profile of students.

Depending on the level of implementation and the scale of use of digital avatars, their benefits can be manifested in the short, medium, and long term, which determines the strategic approach to their integration into the educational process.

In the short term, digital avatars play an important role in monitoring learning activities and optimizing resources. They allow analyzing the effectiveness of educational materials, adapting them to the individual needs of students, which, in turn, reduces the cost of developing curricula. In addition, digital avatars help predict educational outcomes, identifying gaps in students' knowledge and promptly adjusting their educational trajectory. This improves the quality of education and contributes to higher academic performance. An additional benefit is lower operating costs, as digital avatars reduce the need for traditional educational resources such as textbooks and

classroom learning, allowing for more rational distribution of educational institutions' finances.

In the medium term, digital avatars contribute to the efficiency of learning process management. Their implementation allows to improve the administration of educational programs, automate knowledge assessment, and increase teacher productivity. At the same time, they are becoming a key tool for personalized learning, providing students with adapted assignments, materials, and advice according to their level of knowledge and needs. This creates conditions for more effective learning and increased student motivation. Also, digital avatars allow to optimize the costs of educational technologies, helping to implement the latest developments without significantly increasing the budgetary costs of educational institutions.

In the long term, digital avatars are becoming an important tool for integrating innovations into the education system. They can serve as the basis for developing new educational business models based on artificial intelligence, virtual reality, and Big Data. Moreover, their use helps to increase accessibility of education, in particular for students who study remotely or have limited opportunities. Thanks to digital avatars, large amounts of educational data are accumulated, which allows to predict trends in education and develop effective development strategies.

Therefore, in the future, digital avatars may become an integral part of a digital university, providing personalized learning, automated interaction between teacher and student, and increased economic efficiency through optimization of educational processes.

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