

IMPROVING EDUCATIONAL EFFICIENCY BASED ON VIRTUAL EDUCATIONAL TECHNOLOGIES

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Abstract. *The article gives a theoretical analysis in improving educational efficiency primary based on virtual educational technology, reforms in the training of future pedagogies, a modern pedagogical approach to the training of future teachers based on innovative competence, pedagogical activity and practice-oriented education. Virtual educational systems focus the teaching–learning process on new forms of interaction on an educational future oriented to personalize teaching for the students, and new evaluation and teaching processes for each teacher.*

Keywords: *virtual technology, intelligent systems; virtual education; educational data; learning efficiency, improve teaching process.*

Technology in virtual education encourages to demand from the current learning management system towards an intelligent virtual educational system, seeking greater benefit to students in their learning. These intelligent systems must be performed from a new perspective, which will take advantage of the new analytical functions provided by technologies such as virtual technology. It will focus on future pedagogies to improve teaching as well as learning efficiency.

The wide-ranging reforms being carried out in the educational system in today's updated conditions of Uzbekistan require the study and analysis of advanced foreign educational experience and the development of socio-pedagogical and didactic features of adaptation to the conditions of educational institutions.

In higher education institutions, future specialists learn ways to independently and creatively apply theoretical knowledge appropriate to their profession, acquire professional skills, analyze, and jointly carry out educational and educational work. It is known that it is important to educate young people as well-rounded individuals, who are important subjects of social-political, economic, cultural-spiritual renewal of society, in order to move development and influence the processes taking place in life. is important. The most important thing is that pedagogues should try to ensure not only the conduct of educational activities, but also the comprehensiveness of lesson processes based on modern technologies.[1]

In today's updated conditions of the educational system of Uzbekistan, today's teacher has to work in constantly changing conditions, which in turn requires improvement of his professional qualities. The continuous development of pedagogical skills, the development of new technologies of teaching and training in pedagogical practice and their introduction indicate the need for a teacher of today to have additional training in the field of educational technologies.

The current state of society is so multifaceted and technology in different spheres is bringing about relevant changes to improve current processes. Especially, It is a fact that education is one of those areas where technology has been introduced to improve educational processes and achieve greater effectiveness in the teaching–learning process [2].

In accordance with the targeted program of education development in our country, it is necessary to modernize the educational system, retrain personnel, inform the educational process, and create modern information spaces. Such requirements lead to the formation of a new national education system, the development of human capital, and the strengthening of the economy of our country. It is necessary to create conditions for continuous updating of knowledge and competencies of pedagogic personnel and improvement of the entire educational system. The introduction of innovative technologies into the educational process allows students to bring new approaches to their professional activities and increase their level of assimilation to provide them with up-to-date knowledge. Modernization of the educational system also shows changes in the educational activities of the learners.[3]

In accordance with the decision of the President of the Republic of Uzbekistan "On measures to further improve the system of training pedagogues, retraining of public education workers and their qualification improvement", applying innovative scientific achievements, modern pedagogical and information and communication technologies, introduction of techniques and technologies into the educational system that provide for the expansion of distance learning and independent education, introduction of scientific innovations based on the popularization of foreign experiences in the field of retraining and improving the qualifications of teaching staff, as well as the achievements of the best educational institutions marked.[4]

Being among the leading countries in the field of education, the distinguishing feature of Finnish pedagogical education from the rest is the creation of a scientific-research approach to teacher activity. The researcher-pedagogical model regularly analyzes his work, understands the work environment, determines and uses the results of scientific research in the pedagogical activity, evaluates the process of independent learning, based on the results of evaluation, it provides for the development of pedagogical activities and the ability to recognize the needs of education. The European Union Commission recommends that pedagogues should have a higher education and have pedagogical knowledge and skills.

It is precisely in our country that innovative scientific achievements, the use of modern pedagogic and information and communication technologies, the introduction of techniques and technologies into the educational system that provide for the expansion of distance learning, independent education, the retraining of pedagogic personnel and the improvement of their qualifications A number of activities related to the introduction of science-based innovations based on popularization of foreign experiences in the field, as well as the achievements of the best educational institutions, were determined.[5]

The use of modern technologies in the educational process has led to the formation of new educational approach, the development, introduction of new pedagogical technologies, students' minds and their understanding in modern society. As a result, the introduction of techniques and technologies into the educational system that provide for the use of innovative scientific achievements, modern pedagogical and information and communication technologies, distance learning, and the expansion of independent education. based on the popularization of experiences, as well as the achievements of the best educational institutions, the application of science-based innovations has begun. For example, augmented reality, big data , robotics, artificial intelligence, machine learning are some examples of technologies that are already acting in the educational process, allowing new forms of student–teacher interaction to be established, creating new

assessment processes, improving the teaching-learning efficiency or providing analyzed information that is relevant to educational system[6].

One of the fields benefited most from the availability of new technologies is the sphere of virtual educational system. Taking advantage of new forms of education has seen an opportunity for each learner to understand complex concepts, subjects or theories. Intelligent virtual educational systems are not systems that will finish with the classical teaching-learning process. These systems should be seen as a complement to the process that focuses on improving the quality of learning through the automation and analysis of available educational data, seeking to generate knowledge that can be used by institutions or faculty in their strategic or teaching planning. These intelligent systems will make it possible to discover the behavior of students in order to enable personalized teaching in each individual learner can have the right information at the right time and in the right place.

Technology can play an important role in creating lean and efficient processes. It can help you reduce or eliminate duplications and delays in the workflow, as well as help you speed up by automating specific tasks. Our findings show that the use of educational technology enables learners to use tools and online programs to develop their knowledge and acquire new skills, all of which will be useful for future study, career paths and their life.

Learners feel 40% more confident when studying using virtual technology compared to classroom training. On a large scale, Virtual technology learning can be more cost-efficient. Virtual technology learners complete their training four times faster than those in classrooms. Using technology in classrooms has the potential to create increased student motivation, increased social interactions, positive outcomes, enhanced student learning, and enhanced student engagement. Technology is capable of unlocking keys of learning with all students. Using virtual reality in education is becoming important since this technology enhances learners' motivation and performance with changes of learning, problem-solving skills, educational equity, and process of learning.

Virtual technology also supports more powerful visualization and improves educational interaction, enhances collaboration, strengthens students' practical understanding globally. Virtual Reality is the next large scale of used thing in education. It will create a new pedagogy to examine scientific theories which were challenging to understand. It is used in education to enhance student engagement with their study. This creates the real world and it can transform the way of education which is provided nowadays. Virtual reality has these characteristics, especially in education.

Virtual learning is taking off in education with an increasing growing range of teaching process adopting the technology. It can allow students to experience destinations from across the world without ever having to leave the place. In this process, students are able to explore the pyramids at their desks. This is what virtual reality education gives.

Most of people do not comprehend virtual reality but most of people are getting to know what it is or how it is used and its efficiency in learning and education. It refers to interactive content, images or videos which enables the viewer to explore the entire world. The type of virtual reality is most commonly used in education. With this type of this process, real-world locations are captured with all cameras and equipment. It can be used in education to train pupils about the world around them. Virtual reality has a potential ability to inspire and engage students. Students can experience that it would not be possible or too expensive to visit for people. In this way, it can open a whole new world of possibilities to teachers.

Virtual reality helps to improve education by enhancing students with memorable and immersive experiences. It is accessible to every student and can be easily monitored by teachers. Virtual experiences have the power to engage and inspire students in a unique and effective way. Also, given the growth of virtual reality within education, we would not be surprised if it made it onto the curriculum at some point in the future. Curriculum as well as structured lesson plans in schools have already been developed and are available in the UK and in future it will be in developing countries also.

There are so many ways in which virtual reality can help students but the main points are students learn better with the help of experience, it has a powerful ability to inspire, encourages creative thinking and imagination, in education it promotes peer interaction, it engages students, it provides realistic and fantastic experiences as well as it offers memorable educational experience.

Virtual reality gives students an opportunity to learn through experience, to contrast of the traditional methods of reading and writing. Being able to see and experience extraordinary locations within the classroom is totally unique to virtual technology and it is inspirational to students. The immersive experience that it provides in teaching. Students are out of the classroom and their imagination is allowed to flourish to them. The modern technology of virtual technology gets students' attention more.

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