

TO DEVELOP STUDENTS' SKILLS AND ABILITIES TO USE INTELLIGENT SYSTEMS IN E-LEARNING ENVIRONMENT

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ANNOTATION

This article indicate to the aspects that are necessary for the development of students' competencies in the use of intelligent systems in the higher education system. Information is given about the current role and importance of intelligent systems, areas of application, and the advantages of intelligent systems of students'.

Keywords: intelligent systems, artificial intelligence, automated tasks, individual learning, e-learning.

INTRODUCTION

A person-centered e-learning environment in the world Identification of strategic directions of formation, continuous development of scientific potential of pedagogical staff, management of educational institutions on the basis of information and communication technologies in the integrated information educational environment, creation of methodical support of training using intelligent systems in informatization of educational process. Scientific researches are going on. At the same time, research is being conducted to improve the mechanisms for monitoring the dynamics of management of educational institutions, to determine the pedagogical potential of virtual education, to create a unique electronic information system of educational institutions, to create a new generation of educational computer programs.

Introduction of Internet technologies in education in the Republic, information on the activities of educational institutions-legal and regulatory framework for management based on communication technologies has been developed. Resolution of the President of the Republic of Uzbekistan dated September 18, 2019 No PP-8050 "On approval of the Concept of a single information policy of the Republic of Uzbekistan" allowed to accelerate the information policy in the country [1]. Also, the President of the Republic of Uzbekistan on February 17, 2021 "Resolution No. PP-4996 "On measures to create conditions for the accelerated introduction of artificial intelligence technologies" in accordance with the Strategy "Digital Uzbekistan - 2030" and the accelerated introduction of artificial intelligence technologies in our country Priorities have been identified for the widespread use, access to digital data and their high quality, the creation of favorable conditions for the training of qualified personnel in this field [2]. As a result, the legal framework for the implementation of radical reforms in the field has been created and the conditions for education using intelligent systems have been created.

It is no exaggeration to say that the use of e-learning systems in education began in the 80s of last century. Many developed countries, such as the United States, Canada, China, France, Japan, and Germany, focus on education through the use of e-learning systems. we can see that

not only does the acquisition of knowledge in the field but also plays an important role in the formation of skills to use modern technologies. Integration of information and communication technologies with education will increase students' worldview, thinking, perception of existence through modern technologies, as well as

MATERIAL AND METHODS

From the point of view of science, the use of e-learning systems requires the use of various pedagogical methods to organize lessons effectively and at a high level. The world's most advanced educational institutions conduct the educational process using the following educational technologies:

Blended Learning - lessons are organized using both traditional and distance learning forms at the same time. This is an effective technology for the targeted use of teachers' knowledge at a high level. Using this technology, it is possible to organize lessons through a real-time classroom environment for some science subjects and an e-learning environment for the rest.

Interactive tutorial based technology is a unique method of teaching. It is one of the most effective methods of acquiring knowledge in a highly interactive environment. In this case, students can interact with the teacher in real time from the e-learning system.

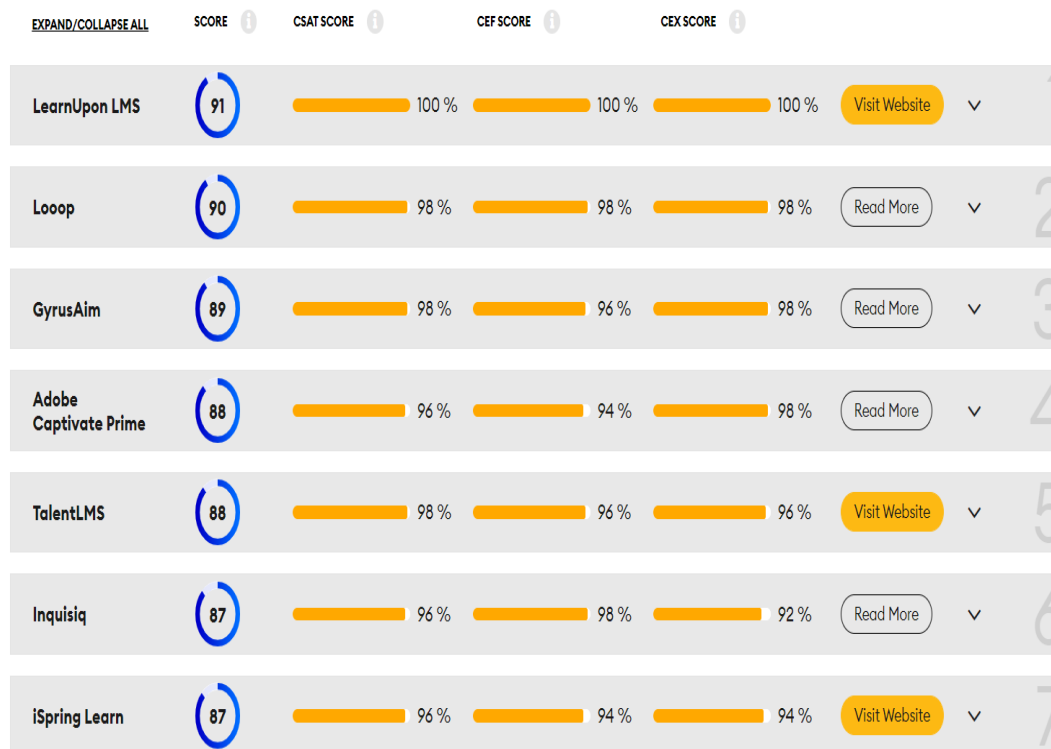
Case based training is the acquisition of knowledge by students through some existing real-life examples. At the same time, examples of situations encountered by students in the workplace are given, and measures to overcome them during the lesson are considered.

Problem-based training - Problem-based learning is seen as a process that involves problem solving and critical thinking in problem situations. This provides opportunities to address broader educational goals aimed at preparing workers for active and responsible roles in their work. Students gain experience in solving specific problems, and the focus is on developing skills and developing thinking skills in solving problems encountered in the workplace.

To use e-learning systems, we can first create such a system or use LMS (learning management system). Today, the use of LMS systems has the highest rates in the world. There are popular LMS systems such as Moodle, Thinkific, TalentLMS, iSpring Learn, Open edX, Canvas. Through the use of these systems, students can access both traditional and distance learning forms at the same time. We can also use the capabilities of these systems to organize quality lessons. At the same time, we can create our own e-learning system. The advantage of this is that when we create such a system, we create ourselves according to our needs and capabilities.

RESULTS

E-learning systems today are called LMS (Learning management system) and there are now more than a thousand education systems around the world. www.elearningindustry.com We can see LMS systems belonging to different industries on the site. We can also see a rating of the most used LMS systems in the world on this website (Picture 1).



Picture 1. Rating of LMS systems as of February 2022

These LMS systems offer their own systems using the latest web technologies in teaching taking into account the capabilities of both the teacher and the students. There is also a comparison on this website so that the user can determine which system is most effective to use. This, in turn, allows users to select and use the system they like best. Because most LMS systems are in the foreign language section, it has been learned through experiments that our students face a number of challenges in using such systems. We believe that the best solution for us is to create an e-learning system in Uzbek for ourselves in the local context. The reason is that first, not all available LMS systems are free, which can cause some problems from an economic point of view. Secondly, since LMS systems are mainly in English in other languages, it is impossible not to take into account that not all of our students know English. For this reason, we believe that the use of our software in the teaching of information technology is effective in all respects, taking into account the fact that the system is primarily in Uzbek, as well as the fact that we do not pay for the use of the system and other aspects.

The organization of lessons based on intelligent systems in the e-learning environment not only serves to increase the effectiveness of education, but also contributes to the development of their competencies in the use of modern technologies. The integration of information and communication technologies into the educational process has a positive impact on the educational process. Intelligent systems are one of the most evolving areas today. Because with the help of modern information and communication technologies, automated control systems are being created in all manufacturing enterprises, transport management systems, education,

medicine and all sectors of the economy with the help of intelligent systems. Today, in developed countries, we can see the development of intelligent systems through smart streets, driverless vehicles and products made with the help of robots in production.

DISCUSSION

Intelligent systems are now evolving at a rapid pace and this is already having a profound impact on the learning process. For example, IBM is using the Watson supercomputer, an emerging form of intelligent systems in educational institutions. This solution provides counseling to students 24 hours a day, 365 days a year, for students at Deakin University in Australia. Although it is based on algorithms that are suitable for performing repetitive and relatively predictable tasks, the use of Watson will affect the future group of administrative workers in intelligent systems of higher education. This changes the structure of the quality of services, the time dynamics of the educational institution and the composition of its staff [12]. A supercomputer that can provide customized feedback at any given time reduces the need for the same number of administrative staff who previously performed this function. In this context, it is also important to note that the impact of intelligent systems on the learning process is promising.

Intelligent systems are a set of methods and tools for organizing, accumulating and applying knowledge to solve complex tasks in some subject area [13]. The intelligent system, based on the highly qualified experience of a team of experts, achieves higher efficiency in the selection of decisions due to the redundancy of a large number of alternatives, analyzing the impact of a large volume of new factors, assessing them in strategy building. The basis of intelligent systems consists of a set of knowledge (knowledge base) structured in order to shape the decision-making process.

Intelligent systems can use materials from a traditional curriculum to create customized textbooks for specific subjects. Such systems digitize this learning material and create new learning e-learning interfaces to help everyone. Intelligent systems can point to the part where topics need to be improved. Teachers may not always be aware of gaps in lectures and teaching materials that can confuse learners with certain concepts. Intelligent systems offer a solution to this problem. Coursera, a major provider of open source online courses, is already putting this into practice. If a large number of students are found to have answered homework incorrectly, the system alerts the teacher and sends a personal response to the students and provides tips for the correct answer. Such a system helps to fill any gaps that may occur in the courses and to create the same conceptual framework for all students. Instead of waiting for the teacher to respond, students receive immediate feedback to help them understand the concept and remember how to do it next time.

Intelligent systems and the learning process go hand in hand, and new techniques will be needed to ensure that all students achieve their ultimate academic success. Smart content is a very topical topic today, and also includes virtual content such as video conferencing, video lectures. As you can imagine, textbooks are entering a new phase. Intelligent systems use traditional curricula to create customized textbooks for specific subjects. As a result, textbooks will be digitized, and new e-learning interfaces will be created to help all classrooms and students of all ages.

Intelligent systems help determine what a student is doing and what they don't know, creating an individualized study schedule for each student, taking into account gaps in knowledge. Thus, Intelligent Systems learn according to the specific needs of students and increase their effectiveness.

CONCLUSION AND ACKNOWLEDGEMENT

In the learning process, intelligent systems expand the scope of learning. In general, intelligent systems and digital technologies help to expand educational opportunities for students around the world. Intelligent search engines and referral mechanisms provide students with the information and resources they need to continue reading. Platforms like the Massive Open Online Course (MOOC) provide instant links to courses for anyone connected to the Internet. This is one of the important advantages of intelligent systems in the learning process. There are no boundaries to learning and intelligent systems can help break down such boundaries. Technology brings sharp transitions, making it easier to learn any field from anywhere in the world and at any time. Intelligent systems-based education provides students with fundamental skills in the field of information technology. With more inventions, online courses will be more widely covered, and with the help of intelligent systems, students will be educated no matter where they are.

Intelligent systems can change where students study, who teaches them, and how they master basic skills. While great changes may occur over the next few years, the reality is that intelligent systems can radically change everything we know. intelligent systems, using software support, students can learn from anywhere in the world at any time, and such programs will be able to replace certain types of reading in the classroom. Educational programs based on intelligent systems are already helping students to acquire basic skills, and in the future as these programs develop and the knowledge of intelligent system developers expands,

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