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INTELLIGENT SYSTEMS IN THE MANAGEMENT OF EDUCATIONAL PROCESSES

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Abstract

The use of digital technologies in improving the quality of education is an urgent task today. The article deals with the organization of educational system management systems and its tasks.

Introduction

One of the main tasks of improving the quality of education is to focus on the organization of the educational process and its improvement. Currently, much attention is paid to the use of a smart educational environment in the organization of higher education management processes. In this regard, the issue of managing the educational process based on the introduction of information and communication technologies in our country was raised. According to the resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On measures to introduce distance learning in higher education institutions", the introduction of distance learning is not possible. Higher and secondary specialized education, organization of distance learning using a special platform or using existing sites, determining the procedure for accepting students for distance learning and organizing the educational process, as well as distance learning. Issues of organizing the quality of monitoring education[1-3].

Methods

The initial purpose of the learning process management system (LMS) is to manage educational activities in educational institutions, and its functions should meet the needs of the daily activities of institutions [4]. Intelligent systems are aimed at increasing the level of educational management of educational institutions, which makes the work of the educational process systemic, standardized and intelligent. Education An intelligent environment can be considered an intelligent learning environment with intelligent and virtual tools to support the learning process [5-7]. Therefore, this environment must support tools that meet the needs of the student, the teacher, and the learning content. The

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intellectual environment should take into account the behavior of students and adequately reflect the personality of students. It involves the reasonable, effective involvement of students in the learning process. This should lead to the adaptation of the content of education to the behavior of each student [8].

The unique architecture of the intellectual system for managing educational processes is arranged as follows (Fig. 1).

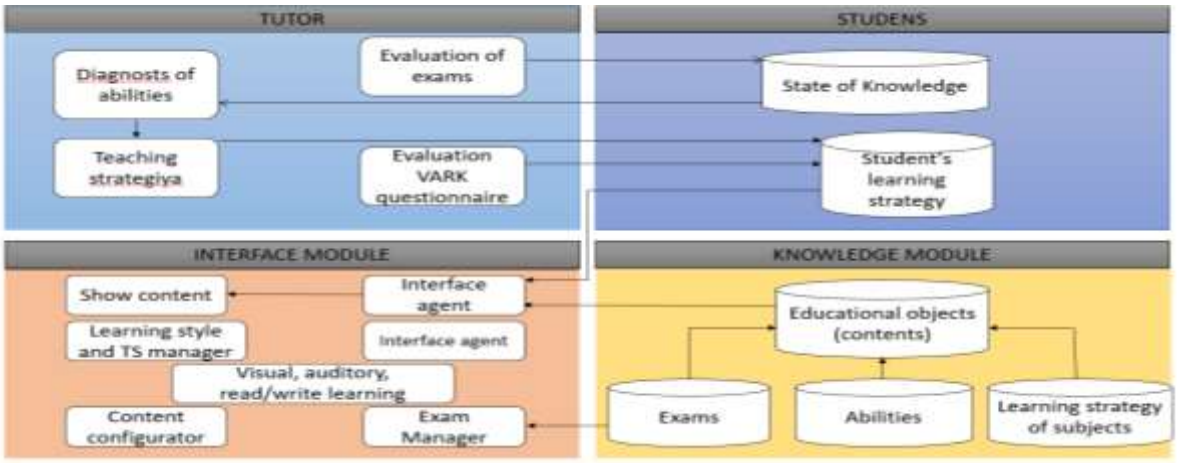

Figure 1. Architecture of an intelligent educational process management system

The LMS is used to perform the following tasks and achieve these goals:

1. Automation and centralization of educational process management.
2. Training to provide students with access to them
placement of materials.
3. Relevance of distance learning technology (DLT) standards
4. Ensuring the reuse of educational materials, educational content
personalization.
5. Mutual cooperation of participants in the educational process
expand opportunities and tools.

Results

Training courses and modules are created in the LMS structure. The structure of the LMS is one of the most important parts for managing the learning process. With this structure, students and teachers will be able to carry out their tasks and manage the learning process. Each course or module provides students with a specific topic to study. For each student and teacher, a personal profile is created in the LMS. This profile stores information about students and teachers.

Test tasks help to assess the level of understanding of students.

The LMS platform for learning management should be compatible with SCORM and have an automatic control system (Fig. 2).

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Фигура 2. Компоненты платформы LMS.

The education management system provides for the use of an information resource component on the LMS platform - educational literature, textbooks, monographs, scientific articles, scientific papers reflecting the results of research. The control component provides the service directory and registry of system users, the rights to use and configure the personal parameters of users when entering the system, as well as recording user actions, authentication (identification) and user management. The attendance and learning component allows you to record the use of resources and the study of these resources, form individual student curricula and analyze learning outcomes. The communication component allows users to exchange information interactively (forum, chat, messages, e-mail, video conference), receive messages and exchange information through feedback on the system, courses and teaching staff.

The contingent accounting component allows you to maintain a unified contingent register, provides input and storage of information about students and teaching staff, as well as access and search for their personal accounts. The course management component has the ability to manage and edit educational content, upload (import/export) video lessons of synchronous and asynchronous learning, organize tests, insert hyperlinks to external educational resources, and set assignments and tasks.

The learning management component controls the process of transferring students from course to course, issuing loans and retraining to them, manages

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organizational and methodological tools (training schedule, consultations, conferences, assignment deadlines, webinars, exams, etc.), automatically generates data about students ', generates and updates the list of subjects to be studied. Provides access to information about the contingent of students, progress, information about the completion of courses with educational content, generates reports on the educational process, the movement of students (enrollment, transfer, keeps information about expulsion, restoration), the statistics component archives information about those who graduated, transferred to study or was expelled. The student knowledge control component includes a base of control materials and a test system formed on the basis of the content of the educational content and based on the requirements of testology, and an autoproctoring system for organizing the examination process.

Learning Management System features help educational institutions seamlessly integrate digital online learning and instructor-led learning. New learning management systems are designed with features that enable learners to learn remotely and conveniently. At the same time, they help teachers to spend their time only teaching students.

While there are hundreds of LMSs, each with unique features and capabilities, the most common components of an LMS in higher education include:

Student attendance monitoring

Registration control and monitoring

Download course materials and document management tools

Web interfaces that provide access to course materials from any device and from anywhere.

Calendars for publishing and sharing schedules, deadlines, assignments and tests

Interactive features that enable communication and collaboration, such as email, instant messaging, discussion forums, and video conferencing.

Assessment tools to test knowledge retention

Assessment features to measure and track student progress

Conclusions

LMS makes it easy to distribute online learning content and makes courses available to teachers and students, no matter where they are. This encourages collaboration outside of the classroom and offers the flexibility to communicate according to each person's preferences and availability. Teachers can seamlessly combine face-to-face and online learning, creating more opportunities to assess performance and quickly identify underperforming students. Quality control

systems for the work of teachers can be implemented in universities where LMS systems are implemented. For example, methods for improving the quality of education and directions for the development of the educational process are determined by conducting anonymous surveys among students and university professors.

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