

## TRENDS OF ELECTRONIC EDUCATION DEVELOPMENT

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### ABSTRACT

The article describes the trends in e-learning development in the education system, how to teach materials for creating online courses and automatic adaptive tests using various E-Learning systems, tools, e-library functions, basic functions of virtual representation, information - educational environment, general concepts.

**Keywords:** E-learning, distance learning, technology, E-Learning, e-library, module, virtual, virtual representation, information, information resources, online courses, communications, networking, internet.

### INTRODUCTION, LITERATURE REVIEW AND DISCUSSION

E-learning is a fast-growing field, with its development beginning in the 1980s (in the form of distance learning and television courses).

Technology has evolved so fast that you can visualize geographical differences by using tools that make you feel in the audience. E-learning enables you to access a variety of materials in video, slideshows, Word and PDF documents. Conducting webinars and interacting with teachers is through chat and forums, which is one of the ways in which users can interact with each other.

There are many different E-Learning systems and methods available to deliver online courses. Various processes can be automated, such as a set of materials for creating on-line courses and automatic adaptive testing with tools. E-learning is a convenient (and often free) solution that allows students to turn their learning into a lifestyle. Even those who are busy will be able to develop further work and gain new skills.

Some of the most important education events have happened since the Internet began to appear. Nowadays, students are well versed in smartphone use, text messaging and the use of the Internet, so attending and interacting with online courses is a simple task. The bulletin board, social networking, and other communication tools allow students to take online courses and discuss common course-related issues while maintaining a common sense [1].

In the fast-paced world of e-learning, technology is available to make the course new and exciting, constantly changing the content of the course, as well as providing students with the latest information. In general, traditional teaching is very expensive, it takes a long time and results are different. E-learning is fast, offers a much cheaper and potentially better alternative.

The term e-learning has existed since 1999. The terms "online education" and "virtual education" have come up with this term. However, the principles of e-learning have been well documented throughout history, and there is evidence that e-learning has existed since the 19th century.

Long before the Internet began, distance learning was offered to students in some subjects or skills.

In the 1840, Isaac Pitman invented a text machine for the first time in 1924, according to correspondents. This device allows students to self-check. Then in 1954, Professor Skinner of Harvard University introduced the term "simulator" to allow schools to manage their students. In 1960 the first computer program was offered. Originally designed for undergraduate students at Illinois State University, it was used in schools across the industry.

The first e-Learning system was designed to provide information to students, but in the 1970s, e-learning became interactive. In the UK, Open University strives to leverage the benefits of e-learning. Their education system is primarily intended for distance learning. First, the study materials were sent from the post office and e-mail correspondence with the teachers. With the advent of the Internet, Open University has offered a wide range of interactive educational services.

With the advent of computers and the Internet at the end of the twentieth century, e-learning tools and delivery methods have expanded. In the 1980s, the first MAS allowed individuals to own a PC at home, allowing them to learn about certain subjects and develop specific skills. Then, over the next decade, the virtual environment of learning began to develop, allowing for greater use of online information and greater opportunities for e-learning.

Technological advances have enabled educational institutions to reduce the cost of distance learning and to save money for a wider audience.

Information and educational environment is a new level of pedagogical system. There are a number of definitions of the concept of the information-learning environment. One of the approaches to this approach can be seen as the "information and educational environment is the pedagogical system plus its maintenance, ie logistical, financial, economic, regulatory, management and marketing subsystem".

The whole core of the information and education environment is the pedagogical system. It is possible to speak about the new direction of pedagogical science, which is being investigated by the newly established pedagogical processes, known as the information-learning environment. This includes a new course called Electronic Pedagogy [2].

The full range of interconnected services that enable the development and implementation of the Virtual Representative Learning Process of the school and the implementation of functional responsibilities of any category of key teachers and students includes software modules. At the same time, the content and the content of the information resources are determined by the educational institution, and the service packages are provided with the standard software. In other words, virtual representation is a software package that includes a complete set of services and information resources that support the learning process in a particular institution. Virtual Representative Administration manages the main school by implementing its own teaching methodology on the basis of standard methodology.

Virtual Delivery provides the following opportunities for every student:

- to use electronic library with educational and methodical support;
- E-mail communication with the teacher;
- teleconference for each training course;
- interact with students in their virtual classroom;
- On-line consultation with a number of teachers.

The following are the basic subsystems of the virtual representation that perform the functions of the virtual representation:

An administrative subsystem is the creation of exemplary modules, registration of users and granting them rights, and interaction of all major modules;

Credential subsystem (e-personnel) is the creation and maintenance of personal folders for all categories of users;

Library subsystem (electronic library) - collection, storage and provision of information resources in accordance with the authority of the user and the conditions set by the institution;

Educational process subsystem (electronic dean's office) - the formation of training groups, training schedules, control over the educational process and other;

- knowledge control subsystem (test subsystem);
- Statistical subsystem - collecting, generating and presenting statistical data on virtual representation, and writing reports on cases;
- Documentation subsystem - to print various documents in hard copy.

The virtual structural representations are the main structural blocks of the learning process.

Electronic Library Functions - The collection and implementation of educational methodology in the online learning process for:

textual materials, audio and video materials, hypertext books, graphic images, computer programs, modeling systems, automated laboratory practice, multiple types of text assignments, etc.

In the learning process, students are provided with optional and additional teaching materials for each subject.

The functions of e-deanery are the formation of appropriate training groups, which allow students and teachers to organize their activities and provide a clear representation of virtual representation [3]. Creates a table for the virtual groups of students in the bulletin boards that are closed off. It may also include information about the composition of the training group, the Virtual Representative Office, the dean's office or the Virtual Representative Office.

In accordance with the teaching methodology, an electronic audience or forums, such as a community tool, can be created (opened) for each group of students. At the same time, the virtual representation of the school forms the educational and administrative resources needed to conduct the learning process, which are referred to as the production module used in the teaching process of a particular subject and Created as needed. Such modules may include:

Chat on some subjects (online classes - seminars and consultations), teleconferences (forums) on subjects (on-line audiences - seminars and consultations), billboards, leaflet, system of individual consultations.

It should be noted that the number of such modules in the virtual representation of the school is determined by the needs of the teachers and the methodology used by them.

Thus, the information-learning environment identifies the new role of the teacher, with the following functions, such as the pedagogical system:

- Coordination of cognitive processes;
- Correcting of a subject;
- Advising on the development of individual training plans;
- Curriculum, adherence to study projects.

The teacher-consultant should demonstrate his / her knowledge, get the technological, organizational, socio-economic and socio-psychological opportunities, and get the maximum pedagogical results.

The educational institution provides courses in one or more special courses (subjects) through the exchange of information. In this case, virtual representation software enables students to choose the teacher they want to study. Students will be able to familiarize themselves with the data that characterizes the experience of each teacher [4]. The selection of the teacher is usually carried out until the selection of teaching materials in the subject is made.

In an educational environment, the conditions for virtual (distributed, extraterritorial) departments that are different from the traditional ones may change. To determine these conditions, it is necessary to carry out an analysis of the type, structure and characteristics of information that provide organizational, methodological and scientific activity of the chairs of the universities of the country and foreign chairs as well as the activities of the department, such as the ergonomic system of the department.

The most important issue is the establishment of scientific and pedagogical activity in the subjects of the Republic of Uzbekistan and abroad, providing training courses, such as virtual chair for students, listeners, graduate students, doctoral students. is the definition of a virtual chair. The department may also include regional teachers, such as teachers of basic educational institutions, who conduct the learning process through their virtual representation. Regional teachers are teaching staff - professors, associate professors, senior teachers, students, postgraduate students, doctoral students, students of one or more basic disciplines through virtual representation of the base educational institution. teachers, assistants.

## REFERENCES

1. Mamarajabov O.E. Benefits of Using Information Technology in the Education System // Vocational Education. Tashkent, 2019. No.1. P. 55-59.
2. Hasanov A.A. Didactic Foundations of Interdisciplinary Connections at Subject Teaching // Eastern European Scientific Journal Germany, 2018. No. 6. P. 127-130.
3. Багбекова Л.К. Проблема мотивации в учебной деятельности // Monografija pokonferencyjna Science, Researche, Development #17/8 Belgrade (Serbia) 30.05.2019-31.05.2019 p.197-199.
4. Murodov S.J. Communication and Culture Value // International journal of Progressive Sciences and Technologies (IJPSAT) vol.14 No. 2 May 2019. pp 203-206.