

## EDUCATIONAL SYSTEM APPLICATION OF INFORMATION-METHODICAL SUPPORT BASED ON CORPORATE NETWORK TECHNOLOGIES

Akbarjon Taniberdiev

Senior instructor in the department of information technologies and applied mathematics at  
Gulistan State University  
akbargdu@mail.ru

### ANNOTATION

The article explains the conceptual underpinnings of developing information-methodical support based on corporate network technologies, as well as the potential for developing an information-methodical system based on these technologies that integrates methodical support from various disciplines into a single system with the aim of developing educational and scientific resources. Students are taught knowledge through the educational portal built on the foundation of the developed corporate network, including reading texts, paying attention to lectures, carrying out tasks for practical training, and self-control.

**Keywords:** corporate network, educational process, distance learning, educational portal, educational resource

### INTRODUCTION

One of the important issues is the employment of contemporary teaching techniques, effective information and communication technology use, and the introduction of remote learning technologies based on corporate network technologies in the educational process designed for students of the twenty-first century.

In our republic, on September 23, 2020, a new version of the Law "On Education" was approved, and on the basis of this law, distance education, one of the new forms of organizing the educational process, was allowed [1]. Distance education is a form of education using information and communication technologies and scientifically based teaching methods [3]. In this form of teaching, it is based on traditional, modern information and telecommunication technologies that provide students with a free choice of a suitable educational subject, communication with the teacher, and depends on the place and time of the student during the teaching process. is done without it.

In distance education, all components related to the educational process (goal, content, method, organizational form, teaching tools, etc.) are implemented with the technical and software tools of Internet technology [4]. The role of information and methodological support in improving the effectiveness of educational services in the organization of distance education is very large. Creation of informational and methodical support of subjects in educational institutions will be based on Internet and Intranet networks and corporate network technologies. Based on these technologies, corporate training portals are created. The word corporate corresponds to the word corporation, and the Latin word "corporatio" means union, association, community [5]. A corporate network is a local network of a large organization

In order to organize distance learning in educational institutions on the basis of a corporate network, it is crucial to develop generic learning tools and systems. The educational portal

contains a set of test systems as well as educational programs, plans, textbooks, instructional and methodical manuals, seminar content, practical and laboratory exercises, and other generalized teaching technologies and systems.

**Analysis of literature on the topic (Literature review).** Research on the introduction of modern information and communication technologies into the educational system A.A. Abdukadirov, M. Aripov, Sh.S. Ahrarov, U. Begimkulov, S. Beknazarova, F. Zakirova, M. Lutfillaev, M. A. Makhmudov, N. A. Muslimov, It was carried out by M. Mamarajabov, N.I. Tailakov, D. Mamatov, A. Makhmudov, S. Tursunov, M. Fayzieva, U. Yuldashev. Also, I.V.Robert, L.I.Antsiferov, V.A.Izvozchikov, V.V.Laptev, A.V.Smirnov, N.A.Sizintseva and others, the theoretical foundations of the creation and use of educational information tools, the study of the information-dynamic learning environment as a factor that develops the information culture of teachers done Abroad E. A. Edmonds, J. Eklund, J. J. Engler, L. Faria, N. Henze, J. Kay, A. Lippman, G. Magoulas, E. Melis, A. Mitrovic, M. Montero, J. Prentzas, E. Schwarz , M. Sigala, L. Thomson, G. Weber, L. Welling, etc., revealed the theoretical and methodological issues of designing the educational system, using computer technol [6].

**Research technique (Research Technique).** The educational portal, created on the foundation of a corporate network, supports the growth of the distance education system while also serving as its primary tool for the development of the organizational, methodological, and legal framework of distance education by giving students and teachers entirely new resources. has a favorable impact on creating and offering pedagogical research. Organization and management of the educational process, its structures, financial and economic affairs management, educational plans and programs, educational materials of educational institutions where distance learning is carried out are placed on educational portals built on the foundation of a corporate network, a set of websites about tests, etc. [6] are all present.

Organization of distance education and creation of its educational and methodological support special requirements are placed on the development of web documents intended for distance learning, including educational sites and educational portals, structure and content. The main teaching-methodical part of the educational portal, established on the basis of a corporate network, is based on an electronic textbook. An electronic textbook is an electronic educational literature intended for the application of the educational method based on computer and information and communication technologies, for independent education and for the comprehensive and effective assimilation of educational materials and scientific information. [7]. The resources of the educational portal established on the basis of the corporate network are considered one of the main tools of distance education, and the organizational-methodical and regulatory-legal basis of distance education is placed on it. Therefore, educational resources serve to provide students and teachers with completely new educational and methodological tools. General, didactic, methodological, psychological-pedagogical, technical-technological, aesthetic, ergonomic and sanitary-hygienic requirements are set for the creation of educational portal resources established on the basis of a corporate network. The contents of these requirements are as follows:

The general requirements are that the structure and content of the educational portal resources are compatible with the curriculum, scientific, problem-solving, demonstrativeness in teaching, awareness, ensuring the independence and activity of the learner, the latest science, technology

and technologies. taking into account the achievements, the systematicity and sequence of teaching in use, the development of students' abilities such as deep thinking and memorization, performing the developmental and educational functions of teaching, searching, collecting, storing, analyzing educational activities, such as processing and calculations, design and construction, experiment, processing of experiment results, control tasks, automation of information processing, simulation of the work of complex objects (machine, equipment, apparatus, device, etc.), should keep various processes in the composition of means of transitions in real, accelerated or slowed down time scale, their training means - implementation of training of the learner in a virtual environment depending on his future professional activity, etc.

Didactic requirements include flexibility, interactivity, computer visualization capabilities, development of the learner's intellectual capacity, thinking, and capacity to make independent decisions in complex situations. They also include the systematic presentation of educational material and ensuring functional dependence, completeness, and continuity of education, as well as having an intellectual teaching system of problem and research assignments.

Methodological requirements are the creation of conceptual, figurative and dynamic components of the presentation of educational material based on the interdependence, providing the educational material in the form of a high-order structure, taking into account the logical interdependence of disciplines, It is possible for the learner to perform various controls for the gradual mastering of the educational material, to have an open system of visualization of all performed calculations, to demonstrate the dependence of variable objects or processes, etc. Psychological requirements - presentation of the educational material is not only verbal, but also corresponds to the sensory and presentation conditions of the cognitive process, taking into account the characteristics of psychological processes such as reception, attention, thinking, imagination, memory retention, the content of the educational material taking into account the age and basic knowledge of learners, focusing on the development of figurative and logical thinking, ensuring the visibility of teaching, sensitively and consciously accepting the objects, their layouts or models studied by students and personal observation, considering the need to take into account his life experience.

Technical and technological requirements - movement in local and other external information carriers and network technologies, allowing maximum use of modern tools of multimedia and telecommunication technologies, ensuring thoroughness and stability in work, heterogeneity (different types provided for in the specification of electronic resources stable operation on computers and other similar means), the possibility of effective and correct use of resources is created and tested. Aesthetic, ergonomic and sanitary - hygienic requirements - font type and size, background symbol and color, the difference between the font and the background, the distance between the lines, the requirements for decorating the screen. The educational portal created for the educational process is a demonstration tool during the educational process, a repeater in independent work sessions organized in computer classes, a tool for independent learning, a methodological assistant during practical and laboratory work, by students is an educational tool that monitors knowledge acquisition, provides problems and exercises for practical and laboratory training.

**Analysis and results (Analysis and results).** The educational portal organized on the basis of a corporate network allows students to read information, listen to lectures, perform tasks intended for practical and laboratory exercises, check their knowledge and, if necessary, fill them in, self- can recommend forms of knowledge such as self-control. The educational portal, organized on the basis of the corporate network, includes simulators, tasks for practical and laboratory training, test tasks, simultaneous education and software that monitors the process of their acquisition. In other words, it consists of test technologies that describe the main informational part of educational subjects, exercises designed to strengthen the acquired knowledge, and provide an opportunity to evaluate students' knowledge [6]. The electronic teaching and methodical materials created for independent educational sessions on the educational portal organized on the basis of the corporate network operate with the help of automated software tools. Automated teaching materials provide learners with information on relevant topics and monitor their knowledge. Depending on the results of knowledge control, students are recommended tasks of different levels. With the help of automated teaching and learning tools, learners can increase and improve their knowledge even without the participation of a teacher. The general structure of this system is shown in Figure 1.

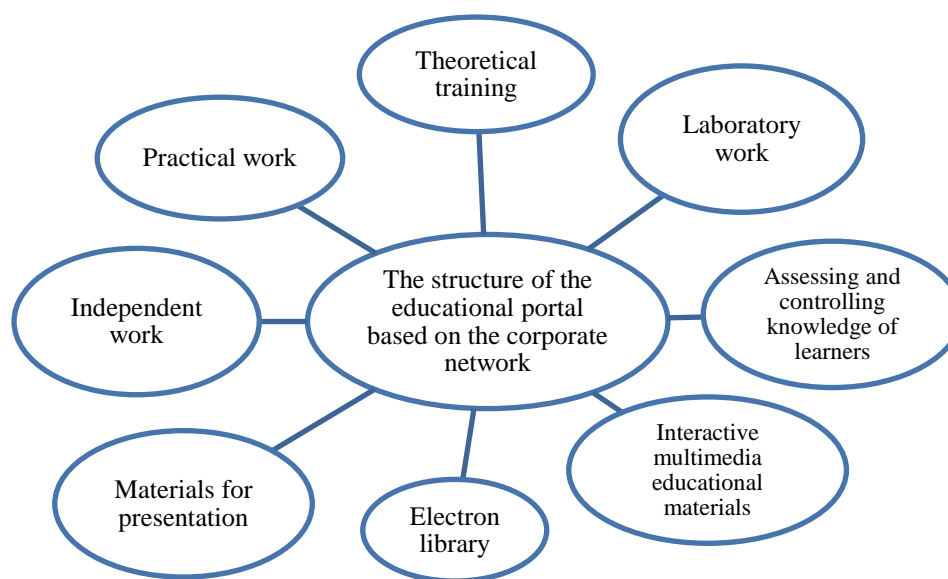


Figure 1. The structure of the educational portal based on the corporate network.

The educational portal established on the basis of the corporate network has the following capabilities:

- informational resources with educational content in science;
- training courses in various directions;
- providing feedback;
- help to quickly find the necessary information;
- consider the time calculation when referring to hypertext explanations many times;
- using the computer's multimedia capabilities to display information on the screen;
- to be able to evaluate the knowledge of students in each section of the subject in accordance with the mastery level;

- to create the possibility of updating the educational information bases of the subject, etc.
- **Conclusions and recommendations (Conclusion/Recommendations).** The advantages of using an educational portal organized on the basis of a corporate network in the educational process are as follows:
  - deeper and more perfect assimilation of the materials given in the educational process;
  - introduction of new forms of education;
  - saving time as a result of the reduction of learning time in the course of the lesson possibility;
  - acquired knowledge can be retained in a person's memory for a long time and can be used in practice;
  - the shortness of time for students to develop certain skills;
  - increase in the number of tasks performed in training;
  - as a result of requiring active control by the computer, the student becomes an educational subject;
  - creation of an opportunity to model and directly demonstrate processes that are difficult for students to observe and observe, etc.

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