



OPPORTUNITIES OF CYBERSPACE IN THE ORGANIZATION AND MANAGEMENT OF MODERN EDUCATION

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ABSTRACT

In this article, the need to further improve the mechanisms of organizing education and training and make changes to its management method based on modern requirements is emphasized, the cyberspace factor is emphasized in revealing the essence of the problem, and the concepts in this direction are analyzed. The trends of correlation between the results obtained in the research process were analyzed through the law of moving from individuality to generality and from generality to particularity, and scientific-theoretical proposals and recommendations were developed through the conclusions of the research process.

KEY WORDS: *theory of education and training, cyberspace factor, educational platform, educational process, electronic education, virtual education, information and communication technologies, educational modernization, personalized education, cyberspace techniques, computer technology.*

INTRODUCTION

The development of the 21st century cannot be imagined without information technology. This factor (cyberspace), which has arisen as a practical result of human potential, raises many issues in the development of mechanisms for the organization of education and training or its management. In this sense, we can say that today's education and training processes are undergoing a serious transformation. In particular, the continuity of the state policy in the field of education in Uzbekistan and the fact that the education system is based on a strict principle that supports the child in every way from birth to the age of 30 make it a worthy place in life. It is not in vain that our efforts are aimed at creating a comprehensive and continuous education and training system, which helps to find. Because in developed countries, great attention is paid to investing in the full cycle of education, that is, in the education of a child from 3 to 22 years old. It is also true that over time, this investment will bring 15–17 times the benefit to society [1.224]. The conclusion from this is that the stability of education and training depends to a large extent on the main reform of the state, in which the organization and management of education and training are a constructive basis.

REVIEW OF THE LITERATURE ON THE TOPIC

The factor of cyberspace, which entered as a revolution of the 21st century, brought a comprehensive modernization stage to the process of organization and management of education, like all spheres of society [2.606]. The concept of “digital education” is rising to the level of a trend in the improvement of the education and training system [3.397-412]. Research aimed at evaluating the potential of cyberspace for educational effectiveness is also being conducted [4]. Scientific conclusions [5.423-427] indicating the need to ensure the integrity of education and training and attempts [6.527-541] to develop its prospective strategy are being researched by the scientific community. However, no sufficient conclusions have been reached regarding the modification of modern education and training and its implementation. Therefore, it was aimed to conduct research within this topic.

RESEARCH METHODOLOGY

In this research, the statistical data are compared and analyzed, and the obtained scientific theoretical data are interpreted in a practical way in a correlational way. This, first of all, allows to identify the social factors that are an obstacle to the development of education and upbringing and to understand the interrelationship between them; secondly, it leads to clarification of the prospective elements of the problem. For this reason, we aimed to find the mechanisms that lead to education and training based on national mentality at a time when modern cyberspace is developing through this method.

ANALYSIS AND RESULTS



As much as it is a complicated issue to ensure the integrity of education and upbringing, it is a problem to adapt the technologies of «weaponizing» it organizationally to the new era. However, as today's development cannot be imagined outside of cyberspace, there is no other way to modernize the management system aimed at increasing the effectiveness of education and training based on the possibilities of cyberspace. In this sense, in the following years, a number of scientific conclusions aimed at effective use of cyberspace opportunities in improving the effectiveness of the organization and management system of education and upbringing will be put forward. Below, we will consider the ideas presented in some of these scientific concepts.

In her research, Russian scientist N.V. Grechushkina analyzes the models aimed at creating an “educational platform” that brings about the integration of education during the digitization of the field of education in the cyberspace range, the organization of online courses, and explores the perspectives of the organization and management of education and training. The researcher focuses more on online education management and finds inconsistencies between different approaches to defining online course integration models in domestic and foreign scientific pedagogical literature, dividing them into three generalized criteria. These are:

- 1) The organization of the educational process (the need to organize an online course for the educational process, the method of organizing the educational process);
- 2) The necessity of categorizing traditional and online components of the educational content (changing the structure of the educational process, teaching forms, and methods);
- 3) The mechanism of determining the interaction of subjects in the educational process (organization of pedagogical support, determining the pedagogical interaction of subjects). This approach allowed us to analyze thirty-four [7.120-130] models for the implementation and integration of online courses, suggesting the following factors underlie this problem:
 - The emergence of the obligation to switch to distance education in the context of the COVID-19 pandemic, first of all, created the need to introduce electronic learning technologies in education. Second, it showed that there is no single (internationally recognized) management mechanism for the organization of online courses;
 - The integration of online courses is largely due to economic costs. For example, the instability of the price of the provided educational services, the lack of profitability between them, the improvement of the quality of education, the limited material and technical base, and problems related to the provision of personnel are the main problems in the integration of the organization of online education [8].

According to Siti Hajar Halili, a scientist from Malaysia, the student's use of technological advances in teaching young people is to strengthen the learning process, arouse interest in students' participation in educational materials, and strengthen the phenomenon of digital education.

The professor suggests paying attention to the following factors when organizing and managing the virtual education process:

1. The mechanism of using technological advances in teaching should be changed;
2. It is necessary to widely introduce technological advances in 3D format into the educational process;
3. It is necessary to increase the student's ability to use virtual reality, cloud computing, holograms, biometrics, multi-touch LCD displays, databases (on the internet), and artificial technologies;
4. Four components should be prioritized in distance education. The first is to organize multilevel collaboration and manage the learning process using charts and a smart board. The second is the training of specialists such as pedagogy and cybergogics in the management of educational activities. Thirdly, higher educational institutions should be prepared for the online education system in two ways (students and teachers) while supporting innovations. Fourthly, it is necessary to develop a mechanism for not falling into the sphere of influence of cyberspace while using [9.63-69] technological advances in the teaching process, and to implement it step by step.

The basis of Hajar Halili's concept is the organization of the educational process in higher education and its remote management.

The importance of the ideas put forward by the researcher can be evaluated as follows:

First, to speed up the learning process, improve students' ability to learn online, control the occasional tasks of teachers, and allow them to devote more time to providing meaningful distance learning for students. can be achieved.

Secondly, it provides a convenient opportunity to find negative factors affecting the quality of education, to facilitate the exchange of information between institutions and students located in different regions, and to evaluate the knowledge of students, that is, to analyze how well they learn subjects.

Thirdly, showing the unique method of improving the education system using the example of “Malaysian education”, using advanced technologies in the teaching process, leaving the traditional approach to education and upbringing of students, and using non-traditional methods It is also important that the effectiveness of management of educational processes be shown on the basis of conclusions obtained from practical results.

The concept of “pathology of education in cyberspace”, put forward by the Australian researcher Syed Hodi Sadeghi, has a special place in the opening of virtual educational opportunities. He evaluates virtual education as follows:

- cyberspace has become a virtual place where people interact with others as in the real world;
- in cyberspace, like in the real world, there are some rules, restrictions, opportunities, training, and instructions;



- the process of virtual education is considered an important event in human social life, and today it has been combined with the improvement of technology and a modern lifestyle;

- educational needs are diverse and widespread, and they are met in different ways. For example, following the development of information and communication technologies and the formation of cyberspace, the demand for virtual or online education is increasing;

- any conscious, rational, and effective activity is determined by its intentions and tasks. Education as an activity also has specific objectives, and the pursuit of education in any subject or course is associated with some goals and objectives, which are carried out to meet specific needs and achieve specific goals[10.39-53]. His conclusion was that it does not matter in what form we receive education. It is important how we intend to get it. Therefore, the pursuit of education using the opportunities of cyberspace can only be beneficial.

Scientific and theoretical conclusions of the researcher[11]:

1) In the past, the educational network was limited only within the family; today, the expansion of communities and the formation of qualitative changes have caused a change in the network of education and upbringing compared to the past;

2) Technology has always helped mankind and helped him improve work and increase efficiency;

3) The form or category of education in cyberspace did not escape the attention of mankind, on the contrary, it was strengthened with the development of everyday technologies;

4) Educational modernization has transformed itself into the use of technology, even creating new forms that lead to the displacement of traditionalism;

5) As a result of the evolution of society and the growth of human needs, various forms of education have been technologically improved.

According to the results of the research conducted by professors Nasser Alalwan, Ahmed Alzahrani, and Mohamed Sarrab of Sultan Qaboos University, the “internet” - a new era of online education has started. This space (cyberspace) became the basis for the opening of new opportunities for information and communication technologies. That is, it ensured the integration of students from different regions of universities. Therefore, there is a growing tendency to look at online education as the “education of the future”. First, it creates an opportunity to use modern technologies to provide new ways of learning, teaching, and learning, which is the main goal of educational systems organized in cyberspace. Second, computer-friendly learning devices have proven to be significantly different from traditional learning systems. Thirdly, various hand-held devices that are tools in the online learning environment, such as smartphones, have increased educational options by allowing access to Internet services anywhere through mobile communication.

The organization of an online educational platform in the concept put forward by this team leads to the opening of the following opportunities in the management of education:

1) In the psychology of increasing the flexibility of classrooms, mobile computing, and communication devices, teachers and students create new opportunities for mutual cooperation;

2) It can enhance student-centered learning through the system;

3) By increasing student flexibility, it creates conditions for accessing online content anytime, anywhere;

4) Gives the student an excellent opportunity to practice at the time he wants;

5) Supports the differentiation of students' educational needs;

6) Students' control becomes freer;

7) It becomes easier for the teacher to manage the student's educational activities;

8) The student is managed effectively;

9) Responds to different types of learning (learning styles);

10) The options for the student to study reading, writing, video, animation, collaboration, discussion, listening, exams, and knowledge are expanded;

11) The student will be able to collect evidence easily with the help of writing, audio, or video, making it possible to use it more effectively;

12) Receiving or providing online training is cheaper than providing the necessary resources for face-to-face training;

13) Reducing cultural and communication barriers between professors and students by using communication channels that students like;

14) Through personalized training, in which the user can be allowed to carry out training on his personal device;

15) Improves social learning and removes technological barriers[12.755-758].

Professor Job Bebenimibo from Nigeria evaluates the possibilities of “cyber education” in terms of facilitating students' education as follows:

first, cyberspace techniques are established as a useful skill in the human mind and deepen the knowledge that students can acquire in higher education institutions, allowing them to master them;

second, the knowledge or skills acquired in cyberspace are necessary for our wider understanding of problems in real society, for developing advanced ideas aimed at solving them, and for promising a better society for the next generation;

thirdly, the unique technological conditions created in the cyberspace increase opportunities in higher education and improve the professional skills of young people;



fourthly, trends in cyber technology create a “revolutionary” turn in human consciousness, creating low-cost but high-benefit opportunities for solving social problems in society;

Fifth, as a result of the artificial intelligence education system, various virtual space techniques (programs) aimed at global teaching and mastering are taking a perfect place in cyberspace as a beneficiary[13.94].

As a result of the development of online education, a person has gained the opportunity to learn for life, says Bulgarian professor Krasimir Sripov. In the object of his scientific research, what is the purpose of learning during human life? How do you plan and manage learning? How do you implement the results of your knowledge? Why should one engage in lifelong learning? How does this relate to economic development and personal success? Simply put, is lifelong learning the only key to meeting the needs of a skilled workforce? raises questions such as these and promotes virtual education (lifelong education)[14.245-247] services to meet the personal needs of a person.

In the concept presented by K. Sripov, the following comments are made:

- in cyberspace, which has become popular since the beginning of the 1990s, changes in many professions and “must-have” new competencies to adapt to today's fierce competition are being promoted;

- with the rapid development of computer technologies, software capabilities, and the Internet, distance education provides powerful, user-friendly online training manuals and cyberspace educational resources;

- in the traditional educational system, the educational process should be compatible with the student's schedule. It limits the age, time, and circumstances of the learner. These problems are solved through “lifelong education”. For example, most of those enrolled in this type of education have already graduated from high school or have obtained a university degree, and they access the «lifelong learning» platform because they know that if they stop studying, they will lose their competitive advantage. those who Because it is natural that any educational system provides unlimited opportunities to citizens and encourages them to continue their studies and professional growth;

- the use of cyberspace for education means that all components of the didactic system should be launched in cyberspace;

- according to the definition of online education, it is the organization of the learning process while the teacher and the student are far from each other. Therefore, any educational cyberspace management should be equipped with the following technological tools:

a) tools for creating and editing educational material;

b) educational process planning and management tools;

c) means of delivering educational material to students and means of teaching through dialogue;

d) tools for checking and evaluating students' skills[15.245-247].

In the concept of K. Sripov, the possibilities of cyberspace are linked to the educational platform, and its importance as a technical device is emphasized more. Of course, this is true from one point of view. Because cyberspace appeared as a result of the development of computer technologies, But the second side of the issue should not be ignored, namely, that the globalization of education (cyber integration) has affected factors such as satisfying individual interests, increasing access to education, reducing distance imbalance, and reducing economic costs. The conclusion is that education and training are processes related to the stability of the organizational structure and the breadth of management.

1. It is necessary to pay attention to the “transfer of education” simultaneously with the possibilities of organizing comprehensive education and training, which are coming after globalization. Because in the cyberspace of education and training, the cross-border area is uncertain, and it (the education and training method, organizational mechanisms, and management apparatus) is naturally more likely to be deformed when it collides with internal and external interests. In this regard, scientists such as Bruner Robert and Juliane Iannarelli express the following opinion: today, on the basis of actions directed toward education, in most cases, global trends developing in business are decided. Among them, one can see goals such as meeting personal needs and maintaining management control. In this regard, the main areas to be focused on are improving the quality of education on a global scale, guaranteeing it, expanding organizational mechanisms, developing and managing educational programs[12.232-242] in international partnerships, and the internationalization strategy as a whole.

Therefore, the organizationally correct organization of interregional “educational transfer” is necessary, firstly if it corresponds to the national interests and the national mentality of the nation, and secondly if it is suitable for a certain stratum of the population (students from underdeveloped or developing countries). also has a positive effect on the tendency toward stratification.

2. It is recommended to give special emphasis to democratic principles in the organization of education and training management. It is a historically proven fact that organizing an educational system without taking into account their psychological experiences and mental-emotional uniqueness does not give effective results since there are minors in the education and training facility. Therefore, organizing the process of education taking into account the national mentality, strictly following democratic principles in directing them to education, and “modernizing education management” depending on the need is the most correct way leading to the expected results. is considered The Brazilians Daniela Patti do Amaral and Ana Cristina Prado Oliveira, who conducted deep scientific research in this regard, obtained the following results:

- democratic management in education - is the basis of the democratization of society, in which it will be possible to develop a political-pedagogical project of education and manage educational processes. In particular, if such a management



system is organized in a virtual form, its efficiency will increase even more. Because the desire for online education is increasing for the majority of school-age students;

- the concept of cyber education on the principle of democracy is seen in the context of micro and macro education. For example, the organization of online debate depends on its macro units of measurement, which in turn are reflected in public administration. Therefore, the organization of democratic politics arises from the characteristics of each subject;

- the democratic management of education depends on the experience of the educational institution, and all the work [17] towards democratization is very necessary in the current educational scenario.

3. As a result of the development of cyberspace, the possibilities of “digital education” are becoming functional and serving human interests. This is definitely a positive situation that comes after digital technologies in personal development. Because today, a person can enjoy online education courses using a simple smartphone. From this point of view, there is less disruption in the educational process following the increased integration of cybereducation. The following considerations can be cited as a basis for this:

First, the change of attitude towards education under the influence of cyberspace led to the popularization of such concepts as “digital student”, “digital knowledge” and “digital employment”;

Second, modern information technologies have become part of the daily education of young people;

Third, virtual education has become a platform that allows the simultaneous use of different methods to educate different types of students. For example, knowledge can be acquired and disseminated in different ways [18]. Most importantly, they are being transformed on the basis of modern technologies. In particular, it would be correct to say that the main plan is to organize the possibilities of interdependence, communication, and cooperation.

The fact that cyberspace has an unlimited geographical area and no layer is left out of its sphere of influence provides many opportunities for organizing, managing, or establishing a control form for organizational issues aimed at the effectiveness of education and training. In particular, the invention of optical communication means, digital technologies, and the development of remote transmission infrastructure changed the public's opinion on the introduction of mechanisms for education, its delivery, and effective education. Territorial boundaries, which existed especially in the educational transformation, have disappeared, and the ground has been created for the introduction of information and communication technologies that serve the interests of the individual.

The following can be added to the unlimited possibilities of cyberspace in organizing and managing the education and training process:

- the fact that all types of propaganda methods are not free from the “encirclement of the information society” means the global impact of cyberspace;

- the transfer of any information in a short period of time: the expansion of the possibilities of its consumption in a person shows the infinity of the information space, which is a factor of cyberspace;

- the space of cyberspace made it possible to use all the factors beneficial to a person at a high level. With its help, it led to the introduction of ideas affecting education and training into practical activities, the production of theoretically based experiments, and the discovery of paths leading to the world of infinity (virtual life) through virtual reality or the Internet.

- the greatest possibilities of cyberspace are that it has the power to keep objective reality within its sphere of influence, to organize and manage all directions of social life, as well as to control the inner mental-emotional state (world) of a person, which makes the phenomenon of cyberspace show leadership in community management. For example, if we take the theory of education and upbringing, today's “educational migration” is a vivid example of this.

In addition to the above-mentioned points, the following **conclusions and suggestions** can be made:

First, the trends of cyberspace, which have entered through information technologies in the 21st century, connect the effectiveness of education aimed at the maturity of young people to the stability of education received in the family, neighborhood, and social environment. This, in turn, shows that the gradualness of education depends on the quality of education provided. Because the possibilities of cyberspace create conditions for young people to receive education that their parents do not give them from virtual courses, lectures, or other forms of “artificial intelligence”. Or, on the contrary, it is gaining access to a diverse database through cyberspace.

Secondly, the socio-cultural image of the world is changing under the influence of cyberspace. For example, it is no longer necessary to travel around the world to gain knowledge. On the contrary, “online movement” is enough to study in the most prestigious universities or colleges-lyceums of the world. In other words, through cyberspace services such as online courses, distance education, and virtual communication, we are creating the necessary “knowledge-skills-qualifications”.

Third, the development of information technology – technical communication, transformational integration, two-way movement, online communication, virtualization of education and training, the creation of a virtual space between students and teachers, creating feedback, increasing information exchange, and cyberspace – is explained by such factors as the expansion of the sphere of influence.

Fourthly, in the improvement of the mechanisms of organization or management of the education and training process, cyberspace is a field of data digitization, a repository of limitless information arrays, a technology for controlling human psychology through virtual reality, a “factory” for creating artificial perception, and a service for coding the source of knowledge. “Organizing, managing, and controlling” such processes has become a system with complex, stable development dynamics.



Fifth, the creation of computer technologies, followed by the invention of the Internet, became one of the most important realities that changed the lives of mankind. Because of these signs of development, the phenomenon of cyberspace has spread throughout the world. Cyberspace is a reality that allows a person to move freely, use any information independently, exchange information in various forms, connect to global communications, integrate parts into a whole, gather social layers into a virtual audience regardless of geographic location, and reveal the boundaries that have been determined by the human factor for thousands of years of performing his duties.

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