

## PEDAGOGICAL AND PSYCHOLOGICAL FOUNDATIONS OF THE MODERN INFORMATIONAL INFORMATION ENVIRONMENT

Norboy Safarov

Head of Chair "Pedagogics, Psychology and Education Technology"

Surkhandarya Region National Center for Training Pedagogues in New Methods

Termez, Uzbekistan

### ANNOTATION

The system of spiritual and moral qualities of high school students is analytically studied in the modern information environment, and the factors for the development of spiritual and moral qualities in students are determined. A software criterion was developed to determine the formation of the spiritual and moral qualities of the 10-11th grade students, and the state of availability was determined in the pilot test with the students.

**Keywords:** modern information, environment, students, spirituality, ethics, globalization, internet, immunity, mass media.

### INTRODUCTION

The educational system suitable for the 21st century requires the training of future specialists based on the requirements of the modern information environment, especially taking into account the goals and tasks of informatization of the society, and the wide use of information and communication technologies in the educational process. However, no perfect scientific study or scientific-methodical complex has been prepared regarding the wide use of information and communication technologies in the educational process and the creation of an informational educational environment for the training of future specialists. Taking this into account, we aimed to describe the goals and tasks of creating a modern information environment for the educational process and the results of our research on its formation[1].

At present, the principles of system integration of information and communication technologies with the educational process in educational institutions and the formation of a modern information environment based on them have not been sufficiently developed. For this reason, we begin the initial stage of work by defining the goals and objectives of the modern information environment. First of all, if we think about the modern information environment, the modern information environment itself consists of an open system that collects cultural-educational, intellectual, software-methodical, organizational and technical resources.

Modern information environment, traditional information environment is a programmatic and communication environment, which is based on the informational support of any number of educational institutions, regardless of the level of education and professional specialization, and evidence based on the "Internet" environment. ``provides integrated technological means of carrying out the educational process[2].

### ANALYSIS AND RESULTS

The main goal of creating a modern information environment in the educational system is to provide educational institutions regardless of the level of education, information, educational

resources, where the learners live, as well as the necessary educational services for them. using the most modern information, environmental information and telecommunication technologies is to satisfy their requirements for acquiring knowledge in a wide range of specialties.

In order to realize the main goal of the modern information environment, it is necessary to solve the following tasks:

- creating an opportunity for modern information environment to conduct its own economic policy without depending on educational methodical supplies, organization and management of the educational process in the formation of a specific educational institution[3];
- preparation of an exemplary service complex for a voluntary educational institution, which provides introduction to all stages of education, taking into account the formalization of the educational process;
- automation of the process of compiling a list (menu) of information and other resources (resources) that provides the opportunity to provide the user with the maximum amount of information in a voluntary educational institution that is part of the modern information environment;
- regardless of where the workplace is, to create an opportunity for voluntary scientific and pedagogic personnel to realize professional attitude in the modern information environment;
- description of statistical and other dynamic information on the modern information environment and automation of their collection;
- to ensure the monitoring of the modern information environment, to collect proposals and opinions and to create mechanisms for its improvement;
- taking into account the implementation of the functional tasks of the modern information environment and its monitoring, organization of the scientific-methodical center and the organization of professors-teachers taking into account the optimization of its activities[4];
- To improve the performance of the functional tasks of the modern information environment, prepare databases regularly.

It is known that when using any technological process in the educational process, it is necessary to take into account its specific features, because the educational system is also a unique dynamic system, which is a society and should reflect the scientific and technical development of the state. Therefore, it is appropriate to provide information about the following necessary aspects in the formation of a modern information environment:

principles of organizing a modern information environment:

modern information environment should provide the following to the user with the help of fast and convenient tools[5]:

- to be able to provide information regardless of the location of the educational institution and the level of specialist training;
- the list of students receiving education in the modern information environment and the specific specialties being prepared in them should be clear;
- it is possible to get optional information sources (resources) from the educational institution wherever it is located;
- technologies related to information and communication technologies must be connected to the modern information environment;

- taking into account the intellectual property of teachers and educators (regardless of where they are);
- it is necessary to take into account scientific and technical programs that take into account telecommunication and educational-methodical resources in the modern information environment[6];
- creation of tools that support the user of the modern information environment;

The first category of information resources consists of an information fund created on the basis of the specific goals of the electronic library for the educational process, in which the expression of information in a virtual image in an arbitrary form on the educational institution, which is part of the modern information environment, has its place. found and this information is ready to be addressed (separated to special directions) depending on its use. These information resources are part of the global (universal) catalog in the modern information environment and they are used in the performance of functional and tasks in the modern information environment, and for other purposes they can also be used in the modern information environment on virtual images[7].

In general, this category of information resources refers to the organization of automated laboratory complexes. For this, the educational institution entering the modern information environment has modern information environment equipment, and even in cases where the educational institution is located far away, it should be equipped with tools for automating work in the modern information environment.

The second category of resources of the modern information environment consists of the catalog of educational and methodical resources of the educational institution participating in this activity. The basis of the information resources is the electronic menu of the voluntary educational institution of the modern information environment.

The third category of resources of the modern information environment is information about various organizational and pedagogical activities, seminars, conferences, symposia in the educational institution, which are part of the modern information environment. In this case, the role of videoconferences is incomparable, with the help of which news happening in a voluntary educational institution can be quickly used in all educational institutions. In addition, the learner receives the information learned not only from his teacher, but also from teachers and educators of other educational institutions, professional education specialists and researchers, doctoral students, and professors in the higher education system. will be able to hear. This increases their interest in their field[8].

The fourth category of resources of the modern information environment is intellectual resources. It includes the products of creative activity of the authors, they are software and technical resources, the results of invention, developments based on the latest achievements of science and technology, and new techniques and technologies created in modern information environment production, as well as automated educational computer systems, databases on intellectualized educational systems, databases on discoveries, inventions and their use in the training of future junior specialists, etc.

Organizational structure view of organization of modern information environment Creation of modern information environment in the educational system is carried out through a homogeneous structure built on the basis of model software designed to work in the

"INTERNET" network. This software is created in special gifted schools, vocational schools, technical schools, universities located in different regions of our republic and equipped with information and communication technologies, and it is used to create regional modern information environments. Each regional modern information environment embodies virtual images representing all the indicators of the educational institution[9]. On the basis of these, a general system base of the modern information environment will be created and the initial opportunity to perform its functional task will be created.

According to the results of our research on the formation of the above modern information environment, the following points can be expressed as a conclusion:

- the rapid introduction of information and communication technologies into the educational process of educational institutions, the educational and methodological support of the educational process is interconnected and it is forced to look at it as a complex of two complementary components, i.e., a complex of educational and methodical support in traditional form and electronic form of educational and methodical support strictly expressed on paper does[10];

- teaching using the environment of the modern information environment, even in the process of continuous education, guarantees the creation of the perfect educational and methodological support of this process, and through this, the text and educational materials are not simply reflected, but It is also possible to demonstrate, as well as tell and show, which guarantees the didactic possibilities and advantages of this educational technology.

It is necessary to improve the introduction of information and communication technologies as an important direction of informatization of pedagogical education and educational processes in general. Information and communication technologies are network technologies that use local and global Internet networks in synchronous and asynchronous modes[11].

Information and communication technologies provide display of video and animation materials on various educational portals, implementation of educational information and communication projects, remote classes, Olympiads. Effective organization of the educational process is provided based on the use of modern information and communication technologies.

In the application of modern information environment, information and communication technologies in the course of the lesson, as well as outside the lesson, the teacher is required to use unique methods, to increase the interests and activities of the students. Education on the basis of information and communication technologies usually provides interdisciplinarity, that is, the integration of different fields of science. There are synchronous and asynchronous systems for receiving educational information through the means of modern information environment and communication technologies[12].

Audio graphics is less common today, it is a method of transmitting sound, computer and graphic information through transmission channels. Graphical information is transmitted by means of fax machines, television sets, computer displays and electronic boards. Pupils draw graphic information on electronic boards, this information is reflected on computer displays. Voice communication is carried out using microphones and loudspeakers. Fax machines are used for conducting tests and transmitting texts of training manuals. In some cases, video projectors are also used in these systems. Whiteboarding system with great capabilities

provides software exchange. Such systems include Optel Telewriter, Proshare and SMART 2000 formats[13].

Teleconferencing (teleconferencing) is a process of using electronic communication channels to organize interaction between two or more groups of participants. Threaded discussions are managed by a moderator. Voice, image or computer data are transmitted during the teleconference. The message sent to the teleconference is delivered to all its participants, that is, the communication is carried out like a communication process around a table.

Teleconference incorporates such technologies as audioconferencing, videoconferencing and computerconferencing.

Currently, the development of computer technologies, new technical possibilities of interactive information and communication technologies have led to the development of these technologies. The implementation of the interactive distance education system ensures the synchronous exchange of information at any distance with the help of video conference technologies. This is of great importance in the transfer of knowledge, formation of qualifications and skills.

Currently, teaching subjects using computers is gaining importance[14]. Educators use the computer not only to prepare methodical materials for the lesson, but also to use the necessary computer programs in teaching the subject, using it as a means of individual work with students. The convenience of the interface, which is part of the computer software tools, provides an opportunity for pedagogues to effectively master modern information technologies. Thus, it is possible to effectively use the possibilities of information and communication technologies in the development of person-oriented education and in the formation of creative abilities of students.

Another important aspect of the reasonable use of computer technologies in the educational process is the creation of a computer model of real processes and experiments. Computer-aided data processing, modeling and display of results, in many cases, replaces the need for expensive experimental equipment, in some cases (atomic and quantum physics, semiconductors, chemistry, biology, astronomy, modeling of processes related to sciences such as medicine) is considered the only way to demonstrate these processes[15].

Modern information and environmental information technologies teach phenomena and processes in the micro and macro world, complex devices, biological systems based on the use of computer graphics and modeling, physical, astronomical, chemical, biological processes that occur at a very high or very low speed in a convenient time scale. helps to solve new didactic issues such as presentation. Therefore, one of the promising directions of introducing modern information technologies in education is computer modeling of events and processes. Computer models help the teacher to harmonize the content of the traditional lesson and to display many effects on the computer screen, to organize new, non-traditional educational activities of the students. It is known that information technology is a set of methods and means of collecting, storing, transmitting and processing information. In the emergence of information technologies, there are internal and external factors that determine its development, which can be described as follows[16]:

□ internal factors are the emergence (creation) of information, its types, properties, performing various actions with information, their collection, transmission, storage, etc.

□ external factors mean the implementation of various tasks with information through technical and hardware means of information technologies.

The use of modern information technology tools depends on the skills and qualifications of the users interacting with them. Therefore, it is important to first find out what the modern information environment and communication means are. The possibilities of modern information environment, information and communication technologies are very wide, and it includes a number of new concepts, in addition to concepts such as computers, multimedia tools, computer networks, the Internet. These can be examples of information systems, management of information systems, information transmission systems, database and database management system, knowledge bank, etc[18].

The development of microelectronics production technology and the creation of computers with modern information environment processors are expanding the possibilities of information processing. Currently, a lot of attention is paid to the computerization of teaching in the field of education, because the use of modern information-environmental teaching technologies in the course of the lesson gives great positive results.

The use of information and communication technologies, their application to a certain field, includes a number of tasks. Below we will consider the objects of informed activity. Such objects include numbers (results of measurements and modeling), texts, statistical and dynamic expressions of visual information, pictures, drawings, animations, sound images (recorded voice, music, etc.).

The user's independent, conscious activity includes creating information objects, searching for necessary information objects, collecting, analyzing and extracting information, organizing it, depicting it in the desired form, creating information objects (text, conversation, picture, game, etc. (in appearance) include transfer, design, modeling, object planning[19].

The means of information and communication technologies are mastered in the conscious, systematic information environment, planned implementation of certain actions. These tools include:

- computer, printer, modem, microphone and sound broadcasting device, scanner, digital video camera, multimedia projector, drawing tablet, musical keyboard, etc. and their software;
- hardware - software;
- virtual text constructors, multiplications, music, physical models, geographical maps;
- collection of information - reference books, encyclopedias, virtual museums;
- technical skills trainers (entering information from a set of keys without looking at the keys, initial mastering of software tools).

The analysis of computer technology-based teaching software in leading educational institutions in our republic and in developed foreign countries shows that they are qualitatively new teaching tools that are superior to traditional teaching methods. Computer-based teaching, editing of lecture texts, analysis of control results submitted by students serve to improve the method of presentation of lecture texts. Students will have the opportunity to see, hear and think about animation elements during the lesson based on multimedia tools[20].

According to these requirements, the organization of the teaching process on the basis of information technology tools facilitates the activities of pedagogues, as a result, it is possible to increase its efficiency in the management of the educational process[24]. In addition, to the

management of the educational institution to monitor the dynamics of students' learning, analyze test results, evaluate the quality of preparation of teachers' lectures and other materials for independent work, perform laboratory work based on multimedia tools provides an opportunity to implement computer-modeled animated presentations, develop proposals for preparing methodical materials for mastering the course, etc.

The issue of using the means of information and communication technologies creates an opportunity to perform the important task of being able to show the internal and external properties of the object that should be demonstrated in the course of the lesson, based on the characteristics of the taught subject. This, in turn, shows the urgency of creating multimedia electronic textbooks based on pedagogical and information technologies[21].

Pupils acquire the skills and qualifications of working with a computer in informatics classes, and professional knowledge is acquired in specialized subjects. It is important for them to apply their knowledge in pedagogical activities, taking into account the issues of interdisciplinarity.

In order to improve the training of qualified pedagogues who teach on the basis of modern information environment and information technologies, it is appropriate to include special courses on information technologies in the curriculum of higher pedagogical educational institutions in undergraduate courses. In these courses, it is necessary to provide knowledge on the introduction of information technologies to the teaching of subjects. In addition, revision of the curricula of "methodology of teaching subjects" taught in the upper courses of higher pedagogical educational institutions and introduction of topics related to the introduction of modern information and environmental information technologies in the teaching of this subject. Necessary[22].

In order to ensure the quality of training of pedagogic personnel, the modern information environment and information society sets requirements related to the ability of pedagogues to use Internet information resources in a targeted manner, to introduce the possibilities of information and communication technologies in the process of acquiring independent knowledge.

## CONCLUSION

In the direction of information technologies in education, who can organize the informatization of the process of pedagogic personnel training in educational institutions, who can use information and communication technologies in a practical way in their professional activities, to produce the methodology and content of pedagogic personnel training operating in an information society. should be considered as a directed direction. Also, the correct understanding of the meaning and essence of the terms widely used in the process of introducing information technologies, their appropriate use serves to ensure the principle of scientificity in education[23].

Training of pedagogues on information and communication technologies can be carried out on the basis of the organization of additional courses on information technologies in education for undergraduate majors, master's specialties, training system. The use of information and communication technologies and their application to any field will greatly contribute to the development of the field. In addition, the correct understanding of the meaning and essence of

the terms that are widely used in the process of introducing information technologies, their appropriate use serves to ensure the principle of scientificity in education.

### REFERENCES

1. Altboeva, G. (2021). Processes Of Formation Intellectual Abilities of Preschool Teachers Through Innovative Technologies. Eurasian Journal of Humanities and Social Sciences, 3, 18-21.
2. Altibaeva, G. M. (2020). IMPROVING THE METHODOLOGY OF CHILDRENS SPEECH DEVELOPMENT THROUGH PEDAGOGICAL DIAGNOSTICS OF FUTURE EDUCATORS. Theoretical & Applied Science, (7), 82-84.
3. Farmonova, S. (2019). THE TOLE OF THE PROJECT TEACHING TOOL IN DEVELOPING THE COMMUNICATIVE CULTURE OF FUTURE TEACHERS. Scientific Bulletin of Namangan State University, 1(6), 434-441.
4. Farmonova, S. (2021). Opportunities for the Development of the Communicative Culture of Future Teachers through the Design of Teaching. International Journal of Culture and Modernity, 11, 172-175.
5. FARMONOVA, S. M. (2020). Improvement of Professional Thinking in Future Teachers. International Journal of Innovations in Engineering Research and Technology, 7(05), 251-257.
6. Kholboyeva, G. U. (2020). IMPROVEMENT OF METHODOLOGICAL PREPARATION OF FUTURE EDUCATORS FOR THE FORMATION OF ECOLOGICAL LITERACY OF CHILDREN. Theoretical & Applied Science, (7), 355-359.
7. Majitovna, A. G. (2022). Processes of formation of intellectual abilities of preschool children by means of innovative technologies. World Bulletin of Social Sciences, 7, 73-74.
8. Sharafutdinova, K. G. (2020). Destruction of family relations psychoprophylaxis family-neighborhood-educational institution cooperation. ACADEMICIA: An International Multidisciplinary Research Journal, 10(11), 1000-1007.
9. Sharafutdinova, K. G. (2021). THE ROLE OF TEMPERAMENT IN THE FORMATION OF INDIVIDUAL AND DESTRUCTIVE INDIVIDUAL RELATIONSHIP STYLE. Theoretical & Applied Science, (8), 210-214.
10. Sharafutdinova, K. G., Kulmamatova, F. K., & Haydarova, S. (2021). The role of cognitive psychology in the elimination of destructive behavior. Asian Journal Of Multidimensional Research, 10(4), 957-964.
11. Xolboyeva, G. U. (2022). МАКТАВГА ТАЙЙОРЛОВ ГУРУHI БОЛАЛАРИНИ МАКТАВ ТА'ЛИМИГА ТАЙЙОРГАРЛИГИНИ ШАКЛЛАНТИРИШНИНГ MAZMUNI, PEDAGOGIK-PSIXOLOGIK TALABLARI. Academic research in educational sciences, 3(3), 792-794.
12. Алтибаева, Г. М. (2016). ИННОВАЦИОННАЯ ДЕЯТЕЛЬНОСТЬ В ДЕТСКИХ ДОШКОЛЬНЫХ УЧРЕЖДЕНИЯХ. Вестник современной науки, (6-2), 15-18.
13. Алтибаева, Г. М. (2016). ОСОБЕННОСТИ ОРГАНИЗАЦИИ ВЗАИМОДЕЙСТВИЯ ДОШКОЛЬНОГО ОБРАЗОВАТЕЛЬНОГО УЧРЕЖДЕНИЯ С СЕМЬЯМИ ВОСПИТАННИКОВ. Вестник современной науки, (6-2), 19-22.



14. Алтибаева, Г. М. (2016). Подготовка детей в школе в условиях дошкольного образовательного учреждения. Евразийский научный журнал, (6), 459-461.
15. Алтибаева, Г. М. (2017). ТЕОРЕТИЧЕСКИЕ ОСНОВЫ СОТРУДНИЧЕСТВА СЕМЬИ И ДОШКОЛЬНОГО УЧРЕЖДЕНИЯ В ВОСПИТАНИИ ДЕТЕЙ. Вестник современной науки, (2-2), 20-22.
16. Алтибаева, Г. М. (2018). АНАЛИЗ ПРОГРАММ ПО ОРГАНИЗАЦИИ ПРАВСТВЕННОГО ВОСПИТАНИЯ И ФОРМИРОВАНИЮ КУЛЬТУРЫ ПОВЕДЕНИЯ. Вопросы педагогики, (2), 7-9.
17. Алтибаева, Г. М. (2018). ОСНОВНЫЕ УСЛОВИЯ И СРЕДСТВА РАЗВИТИЯ ХУДОЖЕСТВЕННОГО ТВОРЧЕСТВА ДЕТЕЙ ДОШКОЛЬНОГО ВОЗРАСТА. Актуальные проблемы гуманитарных и естественных наук, (6), 74-76.
18. Алтибаева, Г. М. (2020). МАКТАВГАЧНА ТА'ЛИМ ТАШКИЛОТИДА INNOVATSION FAOLIYATNI YO'LGA QO'YISHNING SAMARADORLIGI. ИННОВАЦИИ В ПЕДАГОГИКЕ И ПСИХОЛОГИИ, (SI-2№ 3).
19. Холбоева, Г. У. (2016). Содержание и методика проведения физкультурных досугов в дошкольных учреждениях. Вестник современной науки, (6-2), 131-133.
20. Холбоева, Г. У. (2016). Физическое воспитание детей дошкольного возраста. Евразийский научный журнал, (6), 462-464.
21. Холбоева, Г. У. (2020). МАКТАВГАЧНА YOSHDAGI BOLALARGA EKOLOGIK TALIM TARBIYA BERISHDA ZAMONAVIY YONDASHUV. ИННОВАЦИИ В ПЕДАГОГИКЕ И ПСИХОЛОГИИ, (SI-2№ 4).
22. Шарафутдинова, Х. Г. (2021). OILADA DESTRUKTIV SHAXS XUSUSIYATLARI. Academic research in educational sciences, 2(11), 231-236.
23. Шарафутдинова, Х. Г., & Бердиева, М. М. (2018). ПРОБЛЕМА ЛИЧНОСТНО-ОРИЕНТИРОВАННОГО ОТНОШЕНИЯ К РЕБЁНКУ В ПРОЦЕССЕ ОБРАЗОВАНИЯ. Гуманитарный трактат, (25), 89-91.
24. Шарафутдинова, Х. Г., & Нормуминова, Д. Э. (2020). Преодоление тревожности с помощью когнитивно-поведенческой психотерапии. Педагогическое образование и наука, (1), 124-127.