ISSUES OF CREATION OF ELECTRONIC EDUCATIONAL AND METHODOLOGICAL COMPLEXES FOR THE COURSE OF PHYSICAL GEOGRAPHY OF UZBEKISTAN AND THEIR IMPORTANCE

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Abstract. *This article describes issues of creation of electronic training complexes and their importance in the science of physical geography of Uzbekistan. the article also develops methodological complexes of e-learning and methods for their creation.*

Keywords: *innovative technologies, electronic educational and methodological complexes, textbook, map without recording, picture, table, statistical data, natural geography, methodology, higher education, creative works.*

In the environment of modern innovative technologies of the natural geography of Uzbekistan, the problematic method of teaching is widely used together with information-receptive and reproductive methods. In this environment, electronic educational-methodical complexes are used as means of presenting educational content, managing and controlling the student's cognitive activity. The same educational material can be presented in several ways. For example, educational materials can be in the form of publications, audio, video, slides, CDs. Each teaching tool has its own didactic capabilities. The teacher should be well aware of such opportunities and be able to distribute educational materials according to these tools, as well as form learning tools from them as a system of delivering educational information dedicated to the solution of didactic issues. In the environment of modern innovative technologies, the teaching tools of the electronic educational-methodological complex include:

electronic versions of educational textbooks, sets, practical exercises, manuals;
-computer multimedia teaching systems;
- audio educational materials;
-video educational materials;
- computer laboratory work;
-exercise machines;
- information and knowledge base;
-electronic libraries;
-teaching tools based on expert teaching systems;
-educational tools based on virtual reality;

It should be noted that electronic means of education are introduced through new information technology tools. Electronic format copies of traditional textbooks, teaching-methodical manuals and other published materials are used to create electronic teaching-methodical complexes.

When creating electronic didactic materials, you should first pay special attention to the following:

electronic textbooks should be structured in such a way that readers and students should have no difficulty in obtaining additional educational information from them;

expediency of using the module system in forming the structural structure of educational materials;

full instructions for organizing independent education and studying educational materials;

the presence of control tasks, self-examination questions and answers, practice tasks.

In the simplest form, electronic textbooks are in the form of an electronic version of published educational materials. But electronic textbooks are distinguished by the possibility of easy storage in computer memory or other external magnetic media, quick modification and long-distance transmission by e-mail.

Electronic educational-methodical complexes:

- organizational-methodical
- information teacher
- consists of didactic functional blocks that control.

Pedagogical-psychological tasks of the complex are carried out through presentation of educational materials in a hypermedia environment, didactic communication between students and teachers, and teaching tools [1].

Educational software tools:

- individualization and differentiation of the educational process;
- control and properly direct educational activities;
- saving study time due to the use of computing capabilities of the computer;
- visualization of educational materials;
- modeling and simulation of studied events and processes;
- self-control of students;
- formation of optimal decision-making in various situations;
- to develop a certain form of thinking (visual-figurative, theoretical);
- increase study motivation;
- creates opportunities such as the formation of a culture of cognitive activity.

The development of innovative technologies has created new great opportunities for education through the introduction of computer multimedia courses.

Practical analysis of the natural geography of Uzbekistan requires the use of interactive didactic games and exercises in the educational process in order to have a great effect in the educational process. They help to form students' collective or individual activities, professional qualifications and skills. Interactive games provide an opportunity to model situations related to future professional activities in order to form the personality of a future teacher with certain professional qualities and qualifications. It is the creation of didactic games and exercises that creates great difficulties in the creation of electronic educational-methodical complexes. This difficulty is related to software-technical and methodical difficulties.

The electronic textbook is a teaching tool designed for the use of educational methods based on innovative technologies of the natural geography of Uzbekistan, and it can be used for independent education and effective assimilation of educational materials. In the electronic textbook, the teaching materials of the subject are provided to the student in interactive ways, psychological

and pedagogical aspects, modern information technologies, audio and video animations are appropriately used.

An electronic carrier of information is a special device for storing and transmitting information in digital form (diskettes, CD-disk, etc.).

An electronic textbook section is a different field of study, similar to the chapters of a traditional textbook.

An e-textbook module is an organizer of academic subject sections, similar to the topics or paragraphs of a traditional textbook.

Virtual workshops and laboratory stand - computer simulation module of workshop equipment and laboratory stands.

It is clear that the capabilities of electronic textbooks are much wider than traditional textbooks.

Electronic textbooks of the natural geography of Uzbekistan are distinguished by the following main features:

ensure that geography education and training are conducted at a high-quality level;

provision of an opportunity for independent education in the science of natural geography and independent evaluation of acquired knowledge;

coordination of lectures and practical training;

coordination of the development of information-educational resources in natural geography;

presentation of text and other information materials with special navigation (hypertext) and illustrations (multimedia tools, pictures, diagrams and tables).

Electronic textbooks of the natural geography of Uzbekistan make it easier to understand and remember the most important concepts and laws using the benefits of computer technology [2].

The e-textbooks are available in the following formats:

According to the purposes of use: electronic textbooks for collective and individual use.

Electronic textbooks on the natural geography of Uzbekistan, which are used as a team, should not require large computer system resources, because they are placed on a server computer, they can be used through computer networks (Internet or Intranet).

Electronic textbooks and educational materials for individual use are intended for learning without the participation of a teacher.

These two types of electronic textbooks can also be used in classroom training.

Regarding the provision of educational materials: orderly and optional. Orderly: e-textbooks and study guides do not allow you to move on to the next section without mastering the study materials related to a certain section.

On updating modern educational materials and information on the natural geography of Uzbekistan: continuous and periodically updated. Continuously updated e-textbooks are usually placed in e-learning databases (portals, websites, e-textbooks, etc.) and e-libraries. Periodically updated electronic textbooks are mainly provided with electronic media (diskette, CD-disk, etc.).

Electronic textbooks must meet the following principles:

1. The principle of quantization: dividing educational materials into modules of minimal size, closed in content. Modules consist of several levels, but the didactic capabilities of electronic textbooks with levels 4-5 and higher are reduced.

2. The principle of completeness: each module covering the main content of the educational materials should embody the following:

- keywords with hyperlinks;
- theoretical basis;
- theory control questions; - samples;
- issues for independent solution;
- control questions on the module (with answers).

It is desirable to have the following in the first stage module:

- tests;
- control work;
- auxiliary information (Help);
- analyses.

3. The principle of visuality: the modules of modern electronic textbooks on the natural geography of Uzbekistan should consist of a collection of illustrations and frames while maintaining a certain ratio of text and visual materials.

4. The principle of free control: modern students of the natural geography of Uzbekistan should be able to independently control the exchange of frames on the computer screen, display the necessary materials in any amount on the screen, and have the opportunity to independently test their knowledge by completing control tasks.

5. The principle of adaptability: modern electronic textbooks of the natural geography of Uzbekistan ensure adaptation to the needs of a specific user in the educational process, change the complexity and depth of the studied material, its practical orientation, based on the needs of the user It would be appropriate to consider the possibilities of creating additional illustrative materials.

6. The principle of computer use: in order to focus on the essence of modern educational materials of the natural geography of Uzbekistan, the student should be able to use a computer at any time. Such an application is useful in performing long calculations with the help of a computer, drawing various graphs and checking the obtained results at any stage.

Currently, the use of hypertext systems of the natural geography of Uzbekistan in the field of new innovative technologies is spreading widely. At the basis of such technologies lies the rock of replacing the traditional educational text by expanding and deepening it on the basis of more improved educational material, as well as by using courses and animated fragments. In this case, interconnection nodes are established between the fragments of the text separated in one way or another [3].

According to the definition of experts, hypertext imitates (reflects) the ability of the human intellect to remember a large amount of information and to carry out searches by associating communication (communication) and thought processes from this information [4]. In other words, hypertext is a system of educational materials organized at a complex level, which incorporates a lot of statistical and dynamic information and has a generalized network structure. In this, the role of information fragments is played by text, graphics, scheme, video fragment, executive program and animation (moving process).

The global development of modern innovative information and communication technologies has led to a sharp manifestation of their interdependence in various aspects of human life, including economic, political, cultural and educational aspects. Nowadays, the opportunities of innovative information and computer technologies, the emergence of the global Internet network, and the penetration into the multifaceted activities of mankind have increased dramatically.

In the 21st century, the universality of education, as well as the globalization and development of education in various regions and educational institutions, using the opportunities of the rapid development of the global Internet network creates an open education system.

A modern teacher, who can easily use all the advantages of innovative information and communication technologies when teaching a subject, in addition to his specialization in his subject, should have the ability to form the skills of students and students to confidently use these technologies in practice necessary.

- The main goal of informatization of education, based on the use of new innovative information technologies in education, is to consolidate human activity on a global scale and to sharply increase the quality and efficiency of training specialists who have a new worldly mindset suitable for the needs of society.
- Innovative technologies, based on new approaches to the formation of young people who are learning in educational institutions, organize an educational process related to determining their knowledge, skills and abilities, and make it possible to raise education to such a new level of quality. important with
- By using the achievements of modern innovative technologies in the educational process of higher and secondary special education, it opens the way for students to non-traditional sources of information and ensures the effectiveness of independent education, as well as wide scope for creative activity. created opportunities. These aspects require the creation of special technologies for organizing the educational process and monitoring the level of students' knowledge on the basis of highly innovative technologies.
- In the literature of natural geography of Uzbekistan, there are three interrelated areas for the introduction of educational technologies, the first of which is classroom training, the second is electronic libraries, and finally, the third is the use of the Internet innovation information technology system. is displayed.
- The establishment of a single innovative information system in educational institutions implies wide provision of the educational institution with computer tools, as well as its management and provision of the educational process with software and technical tools.
- Informatization of education, first of all, implies the following:
- • systematic study, organization and use of modern means of computer technology, innovative information and communication technologies;
- • organization of students' independent work, educational and methodical provision;
- • work on the creation of the necessary educational and methodological support by teachers;
- • requires improvement of the educational process taking into account the new opportunities arising from the effective use of innovative information technologies.
- The modern innovative technology system of the natural geography of Uzbekistan aims to train personnel who have solid fundamental knowledge and can apply it in their work by mastering a wide-ranging and specialized educational program. .
- The technical, software and methodological tools listed above and aimed at organizing the independent work of students in the creation of a unified information environment

are important in the field of providing this environment, that is, creating an educational and methodological complex, a unified informational environment of education.

➢ The object of the teaching-methodological complex of the science of natural geography of Uzbekistan is the whole set of scientifically based cases, laws, algorithms and technological approaches for teaching a certain subject, as well as includes the content of physical objects (laboratory exercises, seminars and practical exercises). The work of students is carried out on the basis of educational resources presented in the complex, teachers (tutors) and other fellow students with the help of computers and telecommunication tools. Educational-methodical complex (EMC) tools and information-communication environment of education should fulfill the following main functions and requirements:

* registration of students and their activities of using the information environment of the science of natural geography of Uzbekistan;
* to take into account the support of students' activities by the teaching staff through counseling;
* recommending to students for independent learning of the necessary educational materials;
* organization of control of the knowledge, training and skills acquired by students during the educational process with the help of tests, as well as oral and written methods;
* on the basis of educational-methodical complex (EMC), to create an opportunity to use the educational institution's information resources remotely so that students can use the recommended educational materials, additional literature and other tools;
* To organize remote consultation and other assistance of department teachers in the implementation of virtual laboratory exercises and personal practical assignments in the natural geography of Uzbekistan.
* This allows for the introduction of requirements, the creation of an educational information environment, and its gradual implementation according to the levels of formation of the educational-methodological complex of the subject.
* In the first stage, educational programs, texts of lectures, questions intended for control; final control assignments regarding the full scope of the subject; list of mandatory laboratory exercises; their statement and control questions on them; there are methodical recommendations on the implementation of course projects, their calculations and personal assignments.
* In the second stage, it requires the introduction of electronic versions of some parts related to educational materials.
* In the third stage, a teaching-methodical complex will be created for all academic subjects, and the possibilities of learning it by remote or mixed-traditional and modern technologies will be provided.
* In the fourth stage, a multimedia version of the textbook is created, which includes the elements of management appropriate to the student's cognitive activity, as well as the provision of a guaranteed level of student activity at the end of the educational process.
* Taking into account that the science of natural geography of Uzbekistan is based on the interactivity of information and computer technologies, it is appropriate to define its

activity as follows:

* * use of the Internet system in communication with the teacher (the student asks questions, receives answers, submits tests and control work on questions and assignments remotely);
* learner communicates with other young people, fellow students (exchanges opinions on completed work, etc.).
* This activity of the unified information and communication environment (UICE) is of great importance as it allows students to be present in the educational process, determine the interest of the study group, and provide an individual approach to each student.
* The content of the information and communication environment opens up opportunities for the development of new methods of presenting educational materials to the learning process and provides freedom of cognitive activity for the participants of the learning process.
* The content of the modern information and communication environment of natural geography of Uzbekistan forms its new content according to the following changes of education over time:
* in the organization of forms and methods of education, formation of methods and forms of exchange of pedagogical experience, as well as methods of improving the qualifications of pedagogical personnel;
* change in forms and methods of interaction between teachers and students, methodologists and participants of the pedagogical process;
* to recommend the content of separate educational tasks that teachers and students should solve, taking into account the time and place of teaching.

The organization of the activity of natural geography of Uzbekistan in the modern information and communication environment (IIC) in accordance with the above-mentioned goals and on the basis of the tendency to improve its content over time leads to the formation of important and necessary abilities of students in the following directions:

- to be ready to independently learn and independently learn the tools they need to use;
- preparing to share this knowledge with colleagues at their discretion, realizing that they have acquired such necessary knowledge, skills and abilities;
- able to exchange ideas with colleagues on certain issues;
- good understanding of the problems that arise when working as a team;
- to clarify the structure and essence of sufficiently complex processes and systems based on exchange of ideas with each other;
- collect and recommend different forms of information (tables, graphs, internet, reports and video materials);
- desire to continue education in the future, readiness to work in its complex and promising fields.

In our opinion, the formation of geographical thinking as a specific method of solving problems of the "man-nature-society" type in their territorial or spatial aspect should be considered as a strategic goal of geographical education. Geographical thinking in this sense is systematic, complex, spatial, scientific, dialectical, generalized thinking. These children develop as they grow up and experience the world around them. From the point of view of cultural-historical approach, geographical thinking is one of the highest psychic functions.

The goals of teaching geography are active in nature, that is, they can be achieved only by the students themselves in the process of learning and learning. Setting educational goals is directly related to the development of programs and the creation of textbooks, as well as the organization of the process of teaching geography in modern conditions.

In summary, in other words, students acquire certain knowledge, skills and abilities in the modern innovative education process of natural geography of Uzbekistan. Learning material is mastered with the help of various means of meaningful education and with various methods. For this reason, the teacher faces the problem of acquiring ways that help more successful and effective teaching and learning. The search for different forms of studying educational materials begins with understanding the goals and tasks of the lesson.

The methodology of geography education is interconnected with a number of natural, socio-economic and humanitarian sciences. Geography is a very interesting subject and its teaching is very important. The methods of using modern innovative information technologies in classes are a process that depends on the mastery of high and middle special students and their ability to use them in classes. The quality organization of the lesson and the teacher's ability to use pedagogical and psychological technologies create effective education. Because of this, as a synthesis of the process of monitoring, reconnection information and synthesis of new realities, a unified information and communication environment is considered important as a technological organizer of the structure of the National Information System. Such monitoring includes teaching, analysis, forecasting and planning in education.

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