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Issues of Organizing Independent Work Using Information Technology Tools

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Abstract: *In the modern information age, the possibilities of using distance learning based on advanced information and communication technologies in the educational process are steadily expanding. Developing independent work skills through information technologies and training qualified personnel are of great global significance. Experience shows that the integration of information and communication systems into the learning process as a means of acquiring, storing, transmitting new knowledge, and making practical decisions significantly enhances the quality of education. This article analyzes these issues.*
Key words: *independent work, information technology, method, teaching, program, efficiency, distance learning.*

Introduction

The comprehensive reforms being implemented in our country's higher education system, state programs aimed at improving the quality and efficiency of education, government decisions, the attention paid to participants in the educational process, the conditions being created for them, and the search for solutions to existing problems in improving education quality—all these require not only the improvement of the higher education system but also the scientific management of its quality. In particular, the Action Strategy for the Further Development of the Republic of Uzbekistan emphasizes the priority task of "studying important and in-demand subjects such as informatics, mathematics, physics, chemistry, biology, and others in a deepened manner.

A number of scientific research studies have been conducted by scientists of our republic on the issues of organizing students' independent work through distance learning in an information educational environment, applying information technologies in the educational process, and improving its efficiency. Modern educational materials (textbooks, teaching aids, monographs), didactic tools have been developed and subjected to expert evaluation, and a number of scientific articles have been published on these topics.

RESEARCH METHODOLOGY AND EMPIRICAL ANALYSIS

Currently, organizing students' independent work based on network technologies has a number of advantages. It provides access to Internet information-educational resources, allows collective use of the institute's (department's) website, offers opportunities to receive consultations, and facilitates interactive communication. The main factors influencing the effectiveness of organizing students' independent work based on network technologies in the information-educational environment of an educational institution are as follows [6]:

1. Organizing independent work using distance learning systems;
2. Determining the optimal content of educational material for independent work;
3. Forming tasks for independent work aimed at developing the highest level of critical thinking skills;
4. Using ICT tools for performing independent work;
5. Establishing clear criteria for evaluating the performance of independent work;
6. Developing cognitive interests;
7. Developing critical thinking;
8. Fully mastering the subject's educational program.

The pedagogical principles of organizing students' independent work serve as a linking element between teaching methods and forms. These principles have the nature of objective laws; however, unlike natural laws, they do not operate spontaneously. They define the activities of the teacher and student in the real process of distance learning. The pedagogical principles of organizing students' independent work based on distance learning tools include the following:

The principle of interactivity, the principle of individualization of education, the principle of identification, the principle of regulation of education, the principle of relying on basic skills, the principle of advanced teaching, the principle of feedback, the principle of external control and self-assessment. In organizing it, the following factors contribute to ensuring a unified high standard of educational programs and the quality of the educational process by involving leading specialists in a certain direction: Clarity in planning the educational process; Ensuring continuity of the educational process; Providing feedback with students; Presenting necessary illustrative static and dynamic materials; Organizing students' educational and productive activities as a unified process; Using various types of educational materials; Taking into account the limited financial resources characteristic of the education system. In distance learning, educational materials are built on the basis of independent study. Therefore, the entire organization of the learning process should be aimed at managing and organizing the student's independent work with the educational materials, while the classroom instruction should retain only an auxiliary role. The following conditions must be met to organize independent work:

Students' readiness for independent acquisition of knowledge; Availability of necessary educational-methodological and reference materials; A system for regular monitoring of the quality of completed independent work; Advisory support.

RESULTS

To determine whether students' independent educational activities correspond to their intended outcomes, our research identified three levels of assessment within the rating control system: assessment in the information-educational environment; assessment by the teacher; and assessment by the students.

In the rating control system, students' academic achievements are evaluated as follows: work completed in the information-educational environment, as well as work done in the traditional format, is assessed by the teacher; while tasks completed using distance technologies (such as project works, case studies, etc.) are assessed by the students themselves based on criteria developed by the teacher. Thus, the work carried out to develop and implement a model for improving the methodology of organizing students' independent work in the information-educational environment allows continuing pedagogical research in this area and further improving the quality of students' independent work through the use of innovative technologies. We consider the model for improving the organizational and methodological support of students' independent work using the information-educational environment not only as a means to achieve educational goals but also as a tool for developing students' independent activity. It is recommended to organize students' independent work based on professional project activities using distance learning technologies. The project method is a set of educational-cognitive methods aimed at solving problems based on learners' independent activity. The basis of the project method is the development of learners' cognitive skills, the ability to independently design projects using their knowledge, and fostering critical thinking.

CONCLUSION AND DISCUSSION

The methodology is based on a learner-centered approach that implements ideas considering the individual requests and needs of each student. Based on this approach, we have identified the following pedagogical principles of the methodology: **The principle of self-activation.** Every student understands the need to activate their intellectual, communicative, artistic, and physical abilities. Independent work supports students' efforts to demonstrate and develop their natural and social capabilities. The principle of individuality. Conditions are created to form the individual personalities of both teachers and students in independent work. Along with considering the individual aspects of the student and teacher, contributions are made to their further development. The principle of choice. During independent work, the student is always provided with the opportunity to choose; this includes the purpose, content, forms, organization of the learning process, and having full authority in group activities. The principle of creativity and success. Individual and group creative activities in independent work help reveal the student's personal qualities and develop their individual abilities. The creativity manifested in independent work helps the student recognize their own "strengths" and "weaknesses." The effectiveness of lessons in the information-educational environment largely depends on how effectively the communication process between participants is organized. Modern technologies facilitate the organization of all types of virtual communication; however, practice shows that to make the communication process between subjects more effective, it is necessary to develop its methodological approaches.

References

1. Decree of the President of the Republic of Uzbekistan No. PF-4947 dated February 7, 2017, "On the Strategy of Actions for Further Development of the Republic of Uzbekistan." Collection of legislative acts of the Republic of Uzbekistan, 2017, No. 6, Article 70.
2. Guidelines on organizing and monitoring students' independent work.
3. S.E. Umirov, B.Yu. Toshboev, Sh.M. Rasulov, A.Yu. Mustanov. Tashkent, 2012. Regulations on organizing, monitoring, and evaluating students' independent work. Methodological guidelines. 5 pages.

4. Gans-Dieter Hopfner. The Importance of Independent Learning in the System of Secondary Vocational Education. Educational manual for vocational colleges.
5. Uzbekistan-Switzerland "Development of Professional Skills" Project. Tashkent, 2019.
6. Najmiddinova H. Achieving Effectiveness in Students' Independent Learning Activities. Education Problems. 2009, No. 2.
7. Otamirzayev O.U., Zokirova D.N., Vakhobova S.K. Methodological Recommendations on Organizing Students' Independent Work. International Scientific Journal, 2016, No. 4.
8. Otamirzayev O.U., Zokirova D.N., Vakhobova S.K. Using Interactive Methods in Teaching Electrical Engineering. Science Time, 2016, No. 2 (26).