

ORGANIZING STUDENTS' INDEPENDENT KNOWLEDGE ACTIVITY IN THE INFORMATION EDUCATION ENVIRONMENT

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Abstract

The article talks about the conditions and main factors of effective organization of students' independent learning activities in the information-educational environment. Also, management functions of the pedagogue in the organization of students' independent learning activities in the information education environment, problems encountered in independent learning activities and ways to overcome them are also covered.

Keywords: Internet social services, information educational environment, open educational resources, communicative competence.

Today, in our country, organizational pedagogical conditions and information-methodical opportunities for training future specialists are being expanded as a result of great work on the development of professional education. In particular, in the Action Strategy for the five priority directions of the development of the Republic of Uzbekistan in 2017-2021, the priority task of "improving the continuous education system, increasing the possibilities of quality education services, continuing the policy of training highly qualified personnel in line with the modern needs of the labor market" is set.

The convergence of science and information technologies in the world has defined a new stage in the development of didactics of professional education, in which the expansion of its apparatus of concepts, the improvement of transfer-integrative areas, values and educational content arising in pedagogy are of great importance. The need for the integration of educational processes requires the formation of an open information-educational environment, which allows: to take the educational process outside the educational institution; establishment of large educational consortia; creating a global library of educational resources; to ensure the adaptation of future specialists to new working conditions in the global information space. Accordingly, in the process of professional education, in the process of training qualified personnel, it is important to change the current educational approaches, to develop logical thinking and to find solutions to professional problems by developing the skills of independent work.

The shift of education to mixed educational forms and the transfer of the educational process to the information educational environment is an effective form of the educational process and a means of implementing a new educational paradigm, it increases attention to the independent cognitive activity of students, the integration of existing perspectives on independent work, in which the organizational forms of student activity and education are effective. requires coordination. The importance of the information-educational environment is explained by the fact that the educational process is gradually moving to the Internet, in which there are opportunities for the integration of various educational environments, processes and institutions, which do not fit within the scope of one university or institute1. Information processes allow the independent work of students in the information-educational environment to be accepted as an independently organized information-research activity, which requires students to determine the necessary skills and abilities to effectively organize their activities in the information environment. Student's own abilities and implementation of information-research activities taking over independent management and selfconscious influence for the purposes of effective use of their abilities allowed us to conclude on the need for the formation of the following skills and abilities in the student: self-motivation (to achieve goals and activate personal abilities); independent organization of work (for planning work, organizing personal time and space, choosing technologies and methods for solving tasks); self-control (to monitor work progress and its intermediate results, to respond adequately to situations, to limit oneself and to refrain from unproductive actions); self-evaluation (evaluation of work results).

The study of scientific literature and normative legal documents made it possible to distinguish a number of scientific-theoretical rules in the field of quality of higher education, on which the development of the concept of "quality of independent cognitive activity of students" should be based. By the quality of higher education, we mean the level of its compliance with the tasks of social and economic development of the society, the requirements of DTS, and the needs of students. The main consumers of quality higher education are the state, society, employers, individuals and the education system. The quality of independent cognitive activity of students in the information-educational environment is provided by the development, preparation and implementation of the methodology of its organization by the teacher and the quality of its implementation by students. The activity of the teacher is carried out systematically, taking into account the quality of independent work in the information education environment. Auxiliary processes of the quality management system of students' independent work are aimed at preparing students and teachers to work in it, and ensure the more effective functioning of the main processes of the system.

The development of a practice-oriented concept of students in independent cognitive activities in the information-educational environment is the requirements of DTS adapted to the educational goals and research tasks by us; ensuring the quality of independent work process organization of students in an independent informational educational environment; process and system approaches;

continuous improvement of the informational educational environment; decisions are made based on reliable information. The principle of individual activity in the environment creates a basis for the student's independence, and the principle of adaptability and situationality of activity in the environment serves the adequacy of the process of independent work and methods of interaction with the teacher to the situation in the environment. The principle of integrity and optimality of environmental influence helps the student to be influenced by several factors at the same time and in a balanced manner. The environmental approach allows for indirect pedagogical management by implementing environmental management strategies and environmental management actions, which prevent the occurrence of educational risks of various nature in the environment.

Self-management of the student requires the development of his subjectivity, the joint management of the teacher and the student aimed at solving the problems of network communication in an open environment requires the development of "teacher-student" polysubject and their polysubject interaction. The organization of students' independent cognitive activities involves the performance of a number of management functions by the teacher: determining the competences to be formed, determining the content and types of tasks to be performed, developing a calendar-topic plan, methodological support - developing methodological materials and technological maps, differentiating tasks by complexity, quality search for electronic educational and information resources, technological organization - transfer methodological materials to electronic form and fill the environment with them, create individual learning trajectories and feedback elements, update methodological materials and links to information resources, coordinate joint activities - interactive educational dialogue and progress of work performance coordination of online monitoring, expansion of spatial and time boundaries of interaction, control of results - qualitative and quantitative criteria of work evaluation, types of reports, control forms and deadlines development of a notification system for students' achievements and mistakes.

The professional character of the teacher's preparation is reflected in methodological (ensures independent work planning and methodical completion), educational-organizational (ensures its technological organization in the information environment), expert (results-oriented) components, and network cooperation component (ensures coordination of joint activities). The information-technological component is highly technical and, at the same time, basic in nature, it provides the teacher with the knowledge and skills to use information technologies in his professional activities.

Organization of information educational environment opens up new opportunities for students to organize independent cognitive activities. Examples of the forms of organizing independent work in an informational educational environment, known from pedagogical experience, include:

- 1. Search and processing of information: writing abstract-summary; posting a review on the site; analysis and evaluation of abstracts on a specific topic on the Internet; write your version of the plan of a lecture or part of it; creating a bibliographic list; preparing a piece of practical training; preparing a notice on the subject; preparing a debate on the topic; work on a web quest prepared by the teacher or found on the Internet.
- 2. Communicating on the Internet: discussing a topic that has happened or is planned to happen; discussion with the teacher and other learners via teleconference.
- 3. Creating a web-page and web-quests: placing prepared abstracts and reviews on the site; creating thematic web pages individually and in small groups; creating web quests for work on the topic and placing them on the site.

The use of web quests by O. V. Pryadilnikova allows to increase positive results in education, because it improves the tool for managing and controlling the acquisition of new knowledge and their practical application, the quality of independent work changes and the convenience of its implementation is ensured, because students develop their own interests and development, we support the

point of view that they will have the opportunity to choose their work speed (tempo) and volume, taking into account their levels. Thus, in our opinion, the use of web quests in the educational process can develop interest in the student, ensure the interactivity of the educational process, work at a comfortable pace, and help students develop the skills of searching for information and a critical approach to it. The development of a complex of methodical provision of the information educational environment in the organization of independent cognitive activity is one of the conditions for the effectiveness of the organization of independent work3.

Independent work on the acquisition of necessary competencies by students in an informational educational environment is characterized by:

- Increase in cognitive activity due to the use of ICT, problem-based teaching, project-based teaching, critical thinking, active teaching;
- directing the student to individual development, i.e. teaching independence, critical thinking, independent decision-making.

The effective course of any process depends on the factors affecting the successful organization of activities. Accordingly, during the period of conducting the research, it is appropriate for teachers to create problem assignments, projects, solve professional issues, and also use a portfolio when organizing independent cognitive activities of students aimed at acquiring the necessary competencies. Various tools can be used to effectively organize independent education in the information-educational environment.

In short, management of the quality of independent cognitive activity of students in the information-educational environment should be carried out regularly, throughout the entire professional training, gradually increasing the necessary competencies that represent it, during management, the conditions of independent work of students (in an open environment characteristics and characteristics) and primary educational potential (student's readiness for

independent work in an open environment and teacher's readiness to manage its quality) should be taken into account.

REFERENCES

- 1. Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. PF-4947 "On the Strategy of Actions for Further Development of the Republic of Uzbekistan". // Collection of legal documents of the Republic of Uzbekistan. February 13, 2017, Issue 6, Article 70.
- 2. Decision PQ-5812 of the President of the Republic of Uzbekistan dated September 6, 2019 "On additional measures to further improve the professional education system". https://lex.uz/docs/4500926
- 3. Robbins, Steven P., Coulter, Mary. Management. 8-oe izd.: Per. English M.: Izdatelsky dom "ID Williams", 2007. 897 p.
- 4. Mescon, Michael H., Albert, Michael Hadowry Franklin. Basic management. M.: OOO "I.D. Williams", 2008. 672 p.
- 5. Pryadilnikova. O.V. Organization proektno-issledovatelskoy deyatelnosti na osnove Interneta Webquest. // Institut razvitiya obrazovaniya Republic of Bashkortostan. 2018. pp. 23-26.
- 6. A.T. Korucu. Differences between m-learning. Turetsky online journal informatsionnyx tekhnologiy, tom 3, vypusk 2, article 23. S-11.
- 7. Korsak M.M., Surdo A.P. Innovative system of informatsionnogo obespecheniya obrazovatelnoy deyatelnosti VUZa. // Pedagogical science. 2014. №2. P.43-46.
- 8. Prenov B. B., Nurmakhanov K. E. Active methods of teaching analytical geometry in higher education institutions // NeuroQuantology | November 2022 | Volume 20 | Issue 18 | Page 108-111 | doi: 10.14704/nq.2022.20.18.NQ880013.
- 9. K.E.Nurmakhanov. Important factors for using the geogebra program in teaching analytical geometry // Galaxy international interdisciplinary research journal (GIIRJ) ISSN (E): 2347-6915 Vol. 10, Issue 11, Nov. (2022).

10. K.E Nurmakhanov. Improving the Methodology of Using the Geogebra Program in E-Learning Environment // Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 14571 - 14577