

MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL



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<http://mentaljournal-jspu.uz/index.php/mesmj/index>



TECHNOLOGIES FOR ORGANIZING INDEPENDENT LEARNING OF STUDENTS USING THE CREDIT-MODULAR SYSTEM IN HIGHER EDUCATIONAL INSTITUTIONS

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ABOUT ARTICLE

Key words: system, module, credit, technology, educational technologies, independent education, independent education forms, electronic information educational environment, digital technologies, digitization of education, electronic educational resources, e-learning tools, abstract, tests, glossary, case, project.

Received: 09.11.23

Accepted: 11.11.23

Published: 13.11.23

Abstract: This article presents the importance of independent study hours of students in the credit-module system, modern approaches to organizing independent education of students and recommendations for their application. Also, electronic educational resources and tools necessary for pedagogues to effectively organize independent education hours, the importance of electronic information educational environment in organizing independent education of students, should be presented to students in organizing independent education. available resources, forms of organizing independent education (abstract, document, glossary, cases, presentation, project, discussion), conditions for proper and effective organization of independent education, information resources for organizing independent education, methodical materials, control materials, material resources (laboratory, measuring instruments, etc.) were discussed.

INTRODUCTION

On October 8, 2019, the head of our state signed the Decree “On approval of the Concept for the development of the higher education system of the Republic of Uzbekistan until 2030”. This important policy document calls for “at least 10 higher educational institutions of the republic to be included in the list of the first 1000 higher educational institutions of internationally recognized organizations (Quacquarelli Symonds World University Rankings, Times Nearer Education or

Academic Ranking of World Universities)” and a phased transfer of the educational process in higher educational institutions to a credit-module system has been determined” [1].

The credit-modular system is a process of an educational organization and is an assessment model based on a set of modular technologies and a credit measure. Its implementation as a whole is a complex and systematic process. In principle, the credit module attaches importance to two main issues: ensuring independent work of students (IWS); assessment of students' knowledge based on ratings [6].

Credit education technology is a way of organizing the educational process in which students have the opportunity to individually plan the sequence of their educational trajectory. The essence of credit teaching technology is that the labor intensity of educational work is taken into account in credits that characterize the volume of material taught. One of the main tasks of credit education technology is to increase the role of students' independent work [7].

The purpose of introducing credit technology into the educational process of higher educational institutions is:

- organization of the educational process based on modules;
- determination of the cost of one subject, course (credit);
- assessment of students' knowledge based on the rating score;
- give students the opportunity to individually draw up their study plans;
- increasing the share of independent learning in the educational process;
- convenience of educational programs and the possibility of changing them depending on the demand for a specialist in the labor market [10].

The above is not only teaching based on innovative educational technologies, but also teaching students to study and learn independently, to have a new attitude to education, to acquire the necessary and deep theoretical knowledge, and to form practical skills based on the demand of the labor market. In short, this system is aimed at the professional development and maturity of the student. It is aimed at ensuring the education of the scholar throughout his life and at the formation of human capital that can meet the labor market and modern requirements.

IWS is one of the main reserves for improving the quality of education and training of future specialists. In the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated December 31, 2020 No. 824 “On the procedure for introducing the credit-module system into the educational process in higher educational institutions”, 40 - 50% are distributed to classroom hours, 50 - 60% are divided into independent working hours, in master's programs - 30% - 40% are divided into classroom hours, 60-70% are divided into independent working hours [4].

In this regard, in the context of the introduction of a credit education system, the problem of correct and effective organization of students' independent work is very relevant. Thus, the

introduction of credit technology for teaching at universities requires a fundamental revision of the organization of the educational process at the university, changes in the teaching technology itself and their methodological support, and makes it possible to place emphasis on enhancing students' independent work (IWS) [8].

MATERIALS AND METHODS

IWS is work on a specific list of topics allocated for independent study, provided with educational and methodological literature and recommendations, controlled in the form of tests, examinations, colloquiums, abstracts, essays and reports. The entire volume of self-learning work must be confirmed by tasks that require the student to work independently on a daily basis. IWS hours include consultations on the most complex issues of the curriculum, homework assignments, reports and other types of IWS assignments. The content of the IWS is necessarily reflected in the work program and syllabus of the discipline [12].

Independent work of students is a way for a student to actively, purposefully acquire new knowledge and skills without the direct participation of teachers in this process.

Organizational measures that ensure the development of students' independent work skills, nurturing their creative activity and initiative, and also, in general, ensure the normal functioning of students' independent work should be based on the following prerequisites:

- independent work must be specific in its subject focus;
- independent work must be accompanied by effective, continuous monitoring and evaluation of its results [13].

To effectively organize independent work of students, a higher education teacher needs to know and advisably observe the principles of its organization: the principle of systematicity and consistency; principle of activity; the principle of an individual approach; principle of accessibility; principle of visibility; the principle of scientifically based calculation of time and dosage of homework [8].

Subject-wise and substantively independent work of students is determined by the state educational standard, current curricula for educational programs being implemented, standard and working curriculum of disciplines, the content of basic literature: textbooks, teaching aids and methodological guides, and additional literature. Control of independent work and evaluation of its results is organized as a unity of two forms:

- student self-control and self-esteem;
- control and evaluation by teachers, state examination and certification commissions, etc [14].

Independent work in higher education is a specific means of organizing and managing students' independent activities in the educational process, a means of self-organization and self-discipline for students in mastering the methods of professional activity.

An analysis of the available scientific psychological and pedagogical literature shows a variety of approaches and an ambiguous definition of the concept of “independent work of students.” IWS is considered as a form of educational and scientific knowledge, as a form of organization of training, as a teaching method, as a method of creative thinking and as a teaching tool [15].

There are many classifications, which are based on different criteria: according to didactic purpose (B.P. Esipov); on sources of knowledge (E.Ya. Golant, V.P. Strezikozin); by type of tasks (M.G. Garunov, I.Ya. Lerner, P.I. Pidkasisty); by content (I.E. Unt); multi-level classification (O.A. Nilson). Thus, the classification of types of independent work depends on the pedagogical goal, the nature of the student’s activity, the type of independent work, the place where students perform independent work, the degree of independence, as well as on the specifics of the academic discipline, determined by the specific goals and content of training, features of teaching techniques and methods, specific tasks [11].

Activities that create the prerequisites and conditions for the implementation of independent work must provide for each student:

- information resources (directories, study guides, banks of individual assignments, training programs, application packages, etc.);
- methodological materials (instructions, manuals, workshops, workbooks, etc.);
- controlling materials (tests, situational tasks);
- material resources (laboratory, measuring equipment, etc.);
- temporary resources; consultations; the ability to choose an individual educational path (educational programs through elective disciplines);
- the opportunity for public discussion of theoretical and/or practical results obtained by the student independently (conferences, olympiads, competitions) [9].

During independent work, the student can:

- master theoretical material in the discipline being studied (IWS topics, individual topics, individual provisions, etc.);
- consolidate knowledge of theoretical material using the necessary tools in a practical way (solving situational problems, completing tests, self-tests);
- apply the acquired knowledge and practical skills to analyze the situation and develop the right solution (preparation for a group discussion, prepared work within the framework of a business game, “case study”, written analysis of a specific situation, project development, etc.);
- application of acquired knowledge and skills to form one’s own position, theory, model (writing a thesis, student’s research work, etc.) [11].

The assignments received by the student must be completed within the specified time frame and in full. IWS is envisaged as out-of-class work; testing can be carried out at seminars, practical classes and IWS. When completing tasks you must:

- study the topic independently, if necessary, consult with the teacher;
- students must study required and additional literature, statistical data materials, and be able to analyze them to justify the necessary strategies and decisions;
- assignments are prepared individually or in a group [16].

RESULTS AND DISCUSSION

IWS includes reproductive and creative processes in a student's activity and can be carried out at three levels:

1) reproductive activity (mastering and reproducing educational material, independent training work performed according to the model: solving problems, filling out tables, diagrams; the purpose of this type of work is to consolidate knowledge, develop skills);

2) reproductive and practical activity (mastering educational material based on one's own experience, testing the material in practice, in activities, during independent work, drawing up a plan, theses, annotating);

3) creative activity (the student must independently select the means and methods of the work performed, critically evaluate the educational material and use it for productive thinking and activity; coursework and dissertations are completed at this level) [4].

IWS forms:

Abstract – a critical review or presentation of a topic on 10-12 pages in A4 format, 14 in TNR font. The structure is traditional: title page, introduction, main part, conclusions, list of sources used. The abstract can be put forward for discussion in the group.

Report – a summary of the key points of the topic, lasting 3–5 minutes.

Abstract – a brief description of a given topic highlighting key concepts on 2–4 pages of a standard format workbook.

A glossary is a dictionary of concepts and terms on a given topic, formatted in a table [9].

A case is a situation that requires a solution during group analysis. The group consists of 3-4 people who independently discuss the problem and develop ways to solve it. The results of the decision are presented to the general group in the form of a presentation of the final report. The report is a written and oral description of the results obtained during the study, the main problems and proposals for development.

Presentation is a form of presenting information both with the help of various technical means and without them. As a rule, new ideas, projects, services, etc. are presented. It contains text, illustrations and is designed in a single graphic style.

A project is a study on a topic, including search, collection and analysis of necessary information, carried out individually or in a group.

Dispute – discussion of previously prepared questions on a topic with a conclusion.

Assignments for the student's independent work must be clearly formulated, delimited by topics of the discipline being studied, and their volume must be determined by the hours allocated in the curriculum. The following types of tasks are recommended: note-taking; reviewing literature; abstract of articles, books; in-depth analysis of scientific and methodological literature; lecture notes, supplementing the notes with recommended literature; UIRS and NIRS when performing independent, control and diploma work; test; writing an essay on a given problem; performing calculation and graphic work (CGR); performing tasks to observe and collect materials during practice; analytical analysis of a scientific publication on a topic predetermined by the teacher; analysis of statistical and factual materials on a given topic, carrying out calculations, drawing up diagrams and models based on statistical materials [5].

For the correct and effective organization of IWS, the following conditions are of great importance:

- preparedness of teachers to effectively organize independent work on the credit education system;
 - the presence of an educational and methodological complex for each discipline, including a description of the course in printed and electronic form, forms and means of monitoring the level of independent development by the student of the SRS, indicating the content and timing of their implementation, a reference guide for the student for the entire period of study;
 - availability of educational, didactic and educational materials, provision of the library with the necessary literature;
 - selection of the form of IWS depending on the goals and objectives of the academic discipline, degree of complexity and demand for practice;
 - the main goals of assignments for self-help work must be clear to students, educational assignments must contain elements of novelty, must be accessible, and contain algorithms for their implementation;
 - provision of computer and telecommunications equipment;
- IWS should be carried out taking into account the individualization of tasks, and it is also necessary to take into account the level of preparedness and inclination of each student;
- the use of innovative technologies (a set of technical means that provide students with free access to various sources of information and create optimal conditions for the use of electronic learning tools);

- the use of various forms of organization of IWS makes it possible to most effectively stimulate the cognitive activity of students;
- optimal load for students in the field of independent work;
- the IWS monitoring system should have a personal, developmental orientation and creative nature, be connected with self-control, be necessary and useful, first of all, to the student himself [6];
- introduction of interdisciplinary independent work and projects;
- development of social infrastructure, improvement of living and recreational conditions for students and other organizational and subjective factors.

IWS can be organized on the basis of computer and information technologies and their implementation can be carried out in the following ways: electronic textbook, computer training programs, monitoring programs, demonstration programs, computer models and others.

CONCLUSION

In modern higher education practice, various methods and techniques are used to increase the efficiency of students' independent work. Among them, the following can be noted: teaching students methods of independent work; formation of self-regulation of cognitive activity of students; motivation for independent work through demonstrating the need to master educational material for upcoming educational and professional activities; differentiation and individualization of tasks for self-employed workers; formation of a stable positive attitude towards knowledge; methodological support of the IWS; diversity of the nature of tasks for self-employed workers; organization of mandatory control of IWS; differentiated assessment of IWS results; using the capabilities of computer technology with didactic capabilities, the introduction of paired and small-group forms and methods of SRS and others.

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