

## USE OF INNOVATIVE TECHNOLOGIES IN THE ORGANIZATION OF INDEPENDENT EDUCATION

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**Abstract:** The article discusses the possibilities of using innovative technologies in the organization of self-study in the credit-modular system of education, and also gives specific recommendations on the effectiveness of this process.

**Keywords:** credit-module system, independent education, creative thinking, information age, labor market, competitive personnel.

**Annotatsiya:** Maqolada o'qitishning kredit-modul tizimida mustaqil ta'limni tashkil etishda innovatsion texnologiyalardan foydalanish imkoniyatlari ko'rib chiqilgan va bu jarayonda samaradorlikka erishish uchun aniq tavsiyalar berilgan.

**Kalit so'zlar:** kredit-modul tizimi, mustaqil ta'lim, kreativ fikrlash, axborot asri, mehnat bozori, raqobatbardosh kadrlar.

**Аннотация:** В статье рассматриваются возможности использования инновационных технологий в организации самостоятельного обучения в кредитно-модульной системе обучения, а также даются конкретные рекомендации по эффективности этого процесса.

**Ключевые слова:** кредитно-модульная система, самостоятельное образование, творческое мышление, информационный век, рынок труда, конкурентоспособные кадры.

**Introduction:** The current state of the education system shows that the most important thing is that the knowledge we acquire is focused primarily on current issues. This means that changes in the education system, revision of state education standards and curricula in line with modern sustainability, are necessary, natural and very responsible process.

Given that the basics of science are taught in general secondary education, especially in higher education, these changes should be a modern, frequent process in new places. These changes may be different from one higher education institution to another, depending on the circumstances, if necessary. In order to adapt more quickly to these changes, it is necessary for every higher education institution to be academically independent and to create education based on credit-module systems of education, which has been proven in the modern world.

Literature Analysis and Methods: Looking at the history of the credit-module system, Charles Elliot was elected president of Harvard University in 1869, and he soon abolished the university's rigorous curriculum. the student, the unique abilities of the university, among the subjects offered by the students, are created by choosing the winter subjects they are interested in. Thus, in 1872, the first credit-module system was launched at Harvard University. The reform will increase the burden on young people in the United States at Harvard University. University subjects are also naturally selected [1]. Subjects of high practical importance, such as economics and the labor market, will become the main subjects in the curriculum.

Finally, by 1989, a new credit-module system management had been developed in Europe, in line with the American credit system and the Dutch higher education system, and was renamed the European Credit Transfer System (ECTS). Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated December 31, 2020 No 824, Annex 1, Organization of the higher education process. The procedure for the introduction of credit-modules in the educational process is directly related to the Regulation, which states

that “from the 2020/2021 academic year, the educational process in the higher education system of the republic will be gradual (ECTS). stable) the order of transition to the credit-module system is valid” [2].

Switching to a credit-module system, buying a lot for the student, creating conveniences, as well as finding his personal life. This can be seen in the credit-module system, where only independent study hours account for 60% of full-time study at the undergraduate level and 70% at the master's level. So, this is a system that focuses on students' independent learning. Hence, properly structured independent education in this system has led to an increase in the level of education.

Independent learning is one of the requirements of the curriculum in a particular subject and the knowledge and skills that the student needs to acquire, as well as the skills and competencies that the student needs to receive. performed outside the audience on the basis of recommendations [3]. Independent study of the student under the guidance of the teacher (in the course work, course project, thesis for conferences, preparation of articles, etc.) and without the guidance of the teacher (mainly the requirement to develop a particular course to organize).

Students will be able to use the basics of independent study:

Student:

- Ability to independently acquire new knowledge;
- Ability to search for relevant information, identify convenient ways and means of learning;
- Effective use of information sources and addresses;
- Work with educational and scientific literature, normative documents;
- Work with electronic textbooks and databases;
- Effective use of the Internet;
- Database analysis;
- Determine the rational solution of the given tasks;
- Systematic and creative approach to tasks;
  - Be able to receive scientific information independently of educational and scientific literature;
- Must be able to complete practical assignments (independent work) for independent work in practical classes and defend independent work between the responsible teacher and the group of students, etc.

In most cases, students learn to work independently, self-manage, monitor and evaluate, which allows them to understand their activities, self-determine the level of knowledge and skills, see their mistakes and allows them to be eliminated [4].

The final control is carried out by professors and teachers on the basis of the schedule developed by the department in order to clarify the level of mastery of the topic, the achievement of the objectives of the student's independent work. Types of control over the independent work of students and the criteria for their evaluation are developed at the beginning of the academic year and approved by the Academic Council of the faculty [5].

Discussion: It is true that the reforms in the education system today are aimed at developing students' independent thinking, overcoming problems that hinder the development of students' creative thinking skills and the formation of practical skills, but students It is important to keep in mind that it is important for the teacher to organize the process properly, motivate the students in the process, and monitor their activities. Therefore, first of all, every professor-teacher should be well-versed in the methodology of organizing independent learning of students through innovative methods, based on the nature of the subject, and be able to adequately assist the student in this process. To this end, in order to be effective in the student's independent learning without the teacher's guidance, which is the most important thing for students, today the teacher has to decide what specific documents and information the student must provide, that is, the student who wants to learn the subject independently as for what should be in the lead.

- First of all, the student must have a syllabus - a working curriculum for the student. This is because the student needs to have a general idea of the science, albeit superficial, by knowing when, for how long, and what literature he or she can master in a given subject. In addition, the syllabus will cover everything from when to take control of the course, to when to get advice from the teacher.

- Along with the list of textbooks, at least the electronic format of the basic literature should be provided to the student.



- The set of Internet links - digest, which is necessary for mastering the subject, should also be provided to students by the teacher.
- A brief explanation of science terms - glossaries should be prepared by the teacher and given to the student. However, it is advisable to provide the student with links to such references and, if necessary, their basics in electronic form.
- A set of tasks, ie exercises (for example, problems) are very important as they strengthen the theoretical knowledge of the student, as well as develop the ability to apply their knowledge in practice. Cases related to problem situations also serve to develop the student's ability to think independently and creatively.
- Presentations or videos with logical, high-quality animations on specific topics in science increase the student's interest in science.

Forums are a great way for students to exchange ideas about science. Nowadays, there are opportunities for students to master a particular course by helping each other with ideas and information through telegram groups. At the same time, using the most popular mobile applications in the world today, students can achieve high efficiency in independent learning, and so on.

Assignments for independent work are given at the beginning of the semester and their deadline is set. Assignments for independent work should consist of two parts:

1. Mandatory part. Topics within the minimum knowledge that a student should take in a particular course should include course sections.
2. Optional section. Basically, gifted students are given additional assignments and materials to improve their knowledge in this field, so that they can master it independently, which is of a recommendatory nature.

Depending on the situation of the students in the group, the teacher can also ensure the success of students in mastering a certain part of the subject by allowing them to choose topics and materials in a certain order, in separate groups [6].

As the ratio of independent study hours to general education hours increases, educators will not be able to fully control their students. However, by teaching students' self-control, we can dramatically increase educational effectiveness by eliminating one of the shortcomings of independent learning. To do this, we must first ensure that students have a scientifically based strict agenda, as well as sports and fitness classes. No matter what field of study a student is in, he or she must have the understanding and desire to play sports in a way that has a positive effect on the culture of recreation, proper nutrition, and activities.

In any case, the mental state of a student who leads a healthy lifestyle and engages in a certain sport is very stable, and this self-confidence always helps the student to master the sciences and overcome difficulties. At the same time, it is necessary to create conditions for aesthetic recreation of students.

Conclusion: Not only modern knowledge, but also independent analysis of the received information through its advanced analytical-critical thinking, sorting and use of selected information for the development of science, the development of the country, the welfare of the people, As we plan to train competitive personnel in the labor market, it is necessary to use innovative technologies in the process, taking a responsible approach to the organization of independent education in higher education. Students, on the other hand, need to take advantage of the opportunities created by the information age, learn the secrets of science from teachers, get their valuable advice, work on themselves and strive to become competitive professionals in the labor market.

## References

1. <https://mt.bimm.uz>. Organization of educational processes on the basis of credit-module system. Distance learning courses for higher education professors.
2. APPENDIX 1 to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 824 of December 31, 2020 Regulations on the procedure for introducing a credit-module system in the educational process in higher education institutions.
3. Turaev Shukhratjon. The role of independent education in teaching physics. Society and Innovations Special Issue -12 (2021). 115-121.
4. Dadamirzaev G., Vahobova S. Modular education as a means to achieve goals for independent work. International Scientific Journal <http://www.inter-nauka.com>.

5. Siddiq Qahhorovich Qahhorov, Shukhratjon Farmonovich Turaev. An important contribution of independent education in higher education in the training of specialists who meet modern requirements // JOURNAL OF PEDAGOGICAL SKILLS No. 2, (April, 2022), p.75.
6. Балакирева Э.В., Богданова Р.У., Даутова О.Б., Даргевичене Л.И., Пискунова Е.В., Тряпицына А.П. Организация самостоятельной работы студентов по педагогическим дисциплинам: Учебно-методическое пособие для преподавателей высшей школы. Часть I. / Под редакцией профессора, члена-корреспондента РАО А.П.Тряпицыной. – СПб., 2008.