



Technological Approaches To Organizing Independent Learning Based On The Credit- Module System In Higher Education Institutions

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Abstract: The credit-module system is an innovative framework aimed at increasing the efficiency of the educational process by promoting students' independent learning and self-management skills. Unlike traditional education, where students primarily acquire ready-made knowledge, this system encourages them to search, analyze, and draw conclusions independently. A key component of this system is electronic learning resources, which enhance the quality of education by fostering organizational skills, engagement, and practical competencies. These resources include electronic registers, assignments, graded tests, and virtual laboratories, accessible through online and offline platforms. The integration of modern information-communication technologies significantly improves the effectiveness of independent learning, allowing students to tailor their educational experiences. The main objectives of electronic learning resources in higher education involve structuring independent learning, setting clear goals, monitoring progress, and aligning with national training programs. Additionally, these resources facilitate the modernization of curricula, the differentiation of student learning approaches, and the enhancement of the overall educational process. The credit-module system offers multiple forms of assessment, such as exams, tests, and project work, allowing students to accumulate credits and manage their learning flexibly. By incorporating innovative pedagogical methods and digital tools, this system enhances students' self-management skills, optimizes their time allocation, and ultimately improves the quality and effectiveness of higher education.

Keywords: independent learning, credit-module, modern technologies, e-learning, quality-efficiency.



Annotatsiya: Kredit-modul tizimi talabalarning mustaqil ta'lim olishlari va o'z-o'zini boshqarish ko'nikmalarini rivojlantirish orqali ta'lim jarayonining samaradorligini oshirishga yo'naltirilgan innovatsion tuzilma hisoblanadi. An'anaviy ta'limda talabalar asosan tayyor bilimlarni olsalar, ushbu tizim ularni bilimlarni mustaqil izlash, tahlil qilish va xulosa chiqarishga rag'batlantiradi. Ushbu tizimning asosiy tarkibiy qismi sifatida elektron o'quv resurslari ta'lim sifatini oshirishga, talabalarning tashkiliy ko'nikmalarini rivojlantirishga, o'quv jarayoniga qiziqish va amaliy kompetensiyalarni shakllantirishga yordam beradi. Bu resurslar elektron jurnallar, topshiriqlar, baholanadigan testlar va virtual laboratoriyalar kabi elementlarni o'z ichiga oladi hamda onlayn va oflayn formatlarda mavjud bo'lishi mumkin. Zamonaviy axborot-kommunikatsiya texnologiyalarining integratsiyasi mustaqil ta'lim samaradorligini sezilarli darajada oshiradi, bu esa talabalar uchun o'z ta'lim jarayonlarini moslashtirish imkonini yaratadi. Oliy ta'limda elektron ta'lim resurslarining asosiy vazifalari mustaqil ta'limni strukturalashtirish, aniq maqsadlarni belgilash, taraqqiyotni monitoring qilish va kadrlar tayyorlash bo'yicha milliy dasturlarga muvofiqlikni ta'minlashdan iborat. Bundan tashqari, ushbu resurslar o'quv dasturlarini modernizatsiya qilish, ta'lim yondashuvlarini individuallashtirish va umumiy ta'lim sifatini oshirishga xizmat qiladi. Kredit-modul tizimi imtihonlar, testlar va loyihaviy ish kabi turli baholash shakllarini taklif etadi, bu esa talabalarga kreditlarni yig'ish va o'z ta'lim jarayonlarini moslashuvchan boshqarish imkoniyatini beradi. Innovatsion pedagogik usullar va raqamli vositalarning joriy etilishi talabalar uchun o'z-o'zini boshqarish ko'nikmalarini rivojlantirishga, vaqtni samarali taqsimlashga va oxir-oqibat, oliy ta'lim sifatini oshirishga xizmat qiladi.

Kalit so'zlar: mustaqil ta'limni, kredit-modul, zamonaviy texnologiyalar, elektron ta'lim, sifat-samaradorligi.

Аннотация Кредитно-модульная система представляет собой инновационную структуру, направленную на повышение эффективности образовательного процесса путем поощрения самостоятельного обучения студентов и развития их навыков самоуправления. В отличие от традиционного образования, где студенты в основном получают готовые знания, данная система побуждает их самостоятельно искать, анализировать и делать выводы. Ключевым элементом этой системы



являются электронные учебные ресурсы, которые способствуют улучшению качества образования, развивая организационные навыки, вовлеченность и практическую компетентность студентов. Эти ресурсы включают электронные журналы, задания, тесты с оценкой и виртуальные лаборатории, доступные как в онлайн-, так и в офлайн-режиме. Интеграция современных информационно-коммуникационных технологий значительно повышает эффективность самостоятельного обучения, позволяя студентам адаптировать образовательный процесс под свои потребности. Основные задачи электронных учебных ресурсов в высшем образовании включают структурирование самостоятельного обучения, постановку четких целей, мониторинг прогресса и соответствие национальным программам подготовки кадров. Кроме того, эти ресурсы способствуют модернизации учебных программ, индивидуализации образовательных подходов и повышению качества обучения в целом. Кредитно-модульная система предлагает различные формы оценки, такие как экзамены, тесты и проектная работа, позволяя студентам накапливать кредиты и гибко управлять своим обучением. Внедрение инновационных педагогических методов и цифровых инструментов в данную систему способствует развитию у студентов навыков самоуправления, оптимизации распределения времени и, в конечном итоге, повышению качества и эффективности высшего образования.

Ключевые слова: самостоятельное обучение, кредит-модуль, современные технологии, электронное обучение, качество-эффективность.

The credit-module system is a framework designed to enhance the efficiency of the educational process, allowing students to independently manage their learning activities. The system for organizing independent learning is of great importance, as it enables students to adapt their educational processes, manage their time and resources more effectively. Each educational course or subject is based on a specific credit point system. In order to accumulate credits, students must complete a certain amount of independent work.

One of the main reasons for this is that in traditional education, students are only taught to acquire ready-made knowledge. In the credit-module system, students are taught to search for knowledge on their own, learn and analyze it independently, and even draw their own conclusions. The teacher's role is to



create an environment that facilitates the development, formation, knowledge acquisition, and education of the student.

E-learning resources improve the quality and effectiveness of the educational process, shaping students' organizational skills. They increase students' interest and enthusiasm for studying a subject, help in consolidating and mastering knowledge, and develop practical skills and competencies for using knowledge in real-life situations.

The electronic information-educational resource is designed to facilitate deep understanding of learning materials and scientific information through modern information-communication technologies and effective methods of independent learning. It helps in developing students' independent learning, creative thinking, skills, and competencies.

Content: electronic registers, assignments, dictionaries, interesting questions, graded tests, textbooks, laboratory and seminar tasks.

Distribution and usage: internet resources, offline resources, resources for electronic boards.

Composition: independent learning resources for lectures and seminars, virtual laboratories, video lessons.

Application: in the teaching process and organization of independent learning, the implementation of modern pedagogical, innovative, and information technologies is essential for improving the quality of independent learning in the higher education system, as well as promoting advanced work experiences.

The main tasks of electronic learning resources in the higher education system are as follows:

- To develop a unified and comprehensive independent learning process;
- To set clear objectives and tasks to be solved during the independent learning organization;
- To develop the content of the independent learning process;
- To create conditions for students to engage in independent activities and form specific knowledge;
- To monitor and evaluate students' activities;
- To implement the goals and objectives of the National Program for Personnel Training;
- To accelerate the transmission of scientific and technological advancements to youth.



The use of electronic learning resources in the higher education system provides the following opportunities:

- To activate students' learning activities, improve the quality of mastering educational materials, and enhance the efficiency of teaching;
- To differentiate the approach for students with varying levels of preparation and to organize classes at a high aesthetic level (music, animation);
- To develop students' ability to select information flows and transition from descriptive methods to practical activities, transforming the student into the subject of the learning process.

Modernizing the content of the higher education system, introducing electronic learning resources and multimedia technologies into the teaching process based on advanced experience, and focusing on improving the personnel potential will significantly enhance the quality and effectiveness of the higher education system.

Courses can be organized in modular formats. Each module contains specific knowledge and skills that must be mastered, and students learn them independently. Special programs or educational plans should be developed so that students can create their own learning schedules and independently complete tasks on time. These plans should include all necessary materials, resources, and assignments for independent work. Teachers should guide and assist students in their independent learning. This assistance can come in the form of advice, guidelines, or online discussions.

Students should be provided with the necessary resources (books, articles, video lessons, scientific papers) that support their independent study. One of the key elements of independent learning is self-assessment. By evaluating their knowledge and analyzing results, students can improve their learning process. In this evaluation process, teachers' feedback and self-assessment tools can be utilized. Nowadays, online platforms play a significant role in organizing independent learning. Students can access course materials at any time, complete interactive exercises, and consolidate their knowledge. Opportunities for interactive discussions, group work, and online seminars should be created to facilitate knowledge sharing among students. This will contribute to making the learning process more active and effective.

In the credit-module system, there are several forms of assessment for independent study: written exams, tests, project work, and others. By completing independent tasks, students accumulate the necessary credits to



successfully complete the course. The credit-module system helps students manage their time and learning processes more flexibly, develop self-management skills, and improve the effectiveness of their education.

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