



THE LEVEL OF DEVELOPMENT OF STUDENTS' INDEPENDENT LEARNING COMPETENCE IN UZBEKISTAN'S HIGHER EDUCATION INSTITUTIONS UNDER THE CREDIT-MODULAR SYSTEM

Khasanova Gulnaza Rakhatzhanovna

*Doctoral Student at Urgench State University, Urgench city, Republic of Uzbekistan,
220101, <https://orcid.org/0009-0003-9595-6514>*

Article DOI: <https://doi.org/10.36713/epra21938>

DOI No: 10.36713/epra21938

ABSTRACT

This article examines the conditions, opportunities, and preliminary experience of implementing international standards in Uzbekistan's education system, with a particular focus on the introduction of the credit-modular system. The study investigates the ongoing efforts to implement the credit-modular system in Uzbekistan's higher education institutions. The Uzbek adaptation of credit-modular education in the country's higher education institutions is analyzed. Based on this analysis, a set of recommendations is presented.

KEYWORDS: *Credit Module, Independent Learning, Bologna Process, Academic Term, Mentoring, SMART Goal.*

INTRODUCTION

The Republic of Uzbekistan presents itself to the world community as a developing country with a bright future. In order to create a solid foundation for its future and ensure the education and comprehensive development of the next generation, numerous reforms and transformations are being carried out in the country's education system. In particular, Uzbekistan's accession to the Bologna Declaration, signed by 29 countries in June 1999 in Bologna, Italy, served as the basis for beginning work on implementing the credit-module system in the education system. To date, 48 countries worldwide participate in the Bologna Process [4].

The Bologna Process is a process of harmonizing higher education among European countries [7]. It includes creating a clear and comparable system of higher education levels, transitioning to a credit-modular system in education, ensuring free academic mobility to maintain education quality, and fostering European educational cooperation. In essence, it is a process of harmonizing the higher education systems of European countries, ensuring equal access to education for all, forming and strengthening intellectual, cultural, social, scientific, and technological potential, and improving the quality of education [1].

The reforms being carried out in the higher education system under the leadership of the President of the Republic of Uzbekistan provide for creating conditions for Uzbekistan's accession to the Bologna Process in the higher and postgraduate education system in 2017-2021, and introducing a credit-modular system in the educational process to replace the traditional one [2].

The necessity of Uzbekistan's accession to the Bologna Process is due to a number of socio-political factors and objective realities occurring in the field of education, based on the demands of the time. Uzbekistan, as a sovereign country, is strengthening its position in the world community, which means that it cannot remain on the sidelines of modern trends in international development. Uzbekistan's accession to the Bologna Process education system will ensure further expansion of ties in the field of higher education with many countries worldwide and will lead to an increase in the international rating of the country's education system.

The most important component of the pan-European education system is credit technology. Credit technology aims to account for the "quantity of education" received by the student, which is measured by the credit unit - credit. Credit technology is a practical application of the new educational paradigm, and its implementation has become a strategic goal for the development of the technological management process at universities. Credit technology is a new educational paradigm and its practical application [5].

Credit technology is a tool that operates only within a certain educational philosophy, aimed at transitioning educational institutions from a collective form to an individual form of education, ensuring sufficient diversity and flexibility to meet the needs of the educational market. Credit technology emerged long before the Bologna Process as a liberal educational technology, initially formed as a factor of university competitiveness. Credit technology appeared in the USA in the 20th century, long before the Bologna Process became liberal. The idea of mixed programming based on this technology is combined with the idea of modular transmission of educational information [7].



PURPOSE OF THE RESEARCH

The purpose of the research is to analyze the initial experience of implementing the credit-module system in higher education institutions of Uzbekistan, to identify the achievements and problems they faced, as well as to develop recommendations for further improvement of the system.

The basis of our research is the competency-based approach as the most important conceptual position in reforming higher education. The competency-based approach is aimed not at transferring knowledge directly from the teacher to the student, but at developing the joint creativity of the teacher and the student in the educational process.

METHODOLOGY

The study employed methods of document analysis, empirical data collection, and questionnaires. Official documents on the implementation of the credit-module system in higher educational institutions of Uzbekistan were examined, specifically presidential decrees, Cabinet of Ministers resolutions, and regulatory documents from the Ministry of Higher and Secondary Specialized Education. A survey was also conducted among university students regarding the effectiveness of the credit-module system. To achieve more robust results, a questionnaire was administered to 2nd and 3rd-year students in the pedagogical programs at Nukus State Pedagogical Institute, Urgench State University, and Bukhara State Pedagogical Institute (totaling 315 participants). Questionnaires and surveys were developed with input from professors and instructors of the aforementioned educational institutions.

DISCUSSIONS

Implementation of the credit system in Uzbekistan. Specific objectives have been outlined for introducing digital technologies and modern teaching methods in higher education processes, broadly engaging youth in scientific activities, combating corruption, increasing the proportion of students in engineering and technical education programs, implementing a credit-modular system, and increasing the share of practical classes in specialized disciplines aimed at enhancing practical skills in curricula. Based on these objectives, to improve the quality of education in the higher education system and foster academic mobility among students across higher educational institutions, starting from the 2020-2021 academic year, the educational process in the republic's higher education institutions has been organized on the basis of a credit-modular system. Higher education institutions in the republic have implemented a credit-modular education system based on the European Credit Transfer and Accumulation System (ECTS). The academic year lasts up to 36 weeks, with 30 weeks allocated for the academic period, 2 weeks for elective subject registration, and 4 weeks for assessment [8].

In our country's higher education institutions, 1 credit is equivalent to 25-30 academic hours of study load. This means a student must complete a certain amount of study load to accumulate the corresponding credits for a particular subject. The study load in bachelor's programs comprises 40-50% classroom hours and 50-60% independent work hours, while in master's programs it consists of 30-40% classroom hours and

60-70% independent work hours (excluding internships and final qualification work). For bachelor's and master's programs, a student is typically expected to earn 30 credits per semester and 60 credits per academic year. The number of credits a student must complete during a semester includes both compulsory and elective subjects specified in the curriculum. When forming their individual educational trajectory, students must complete subjects totaling 30 credits per semester. Students must accumulate 180 credits for bachelor's programs lasting at least 3 years, and 240 credits for programs lasting at least 4 years. For master's programs, 60 credits are required for programs lasting at least 1 year, and 120 credits for those lasting at least 2 years. Due to the integration of our republic's higher education system into the European educational space, it became necessary to revise and improve the State Educational Standard for Higher Education [5].

One of the primary goals of higher education is to orient specialists towards self-development, independent knowledge acquisition, and the formation of a creative personality capable of innovative activity. To accomplish this task, it is insufficient to simply transfer ready-made knowledge from teacher to student. Such an approach turns the student into a passive consumer of knowledge. However, today we need not passive consumers of knowledge, but active creators. The outcome should be such that future specialists can formulate any theoretical or practical problem, scientifically or methodologically analyze ways to solve it, identify the most suitable solutions, and prove their validity.

Changes in the education system are closely tied to the content of education. These updates also necessitate consideration of new forms and methods of organizing student learning. In this context, organizing students' independent work is not only an important form but also a crucial component that forms the foundation of the educational process [4].

The student's independent study load is an integral part of the educational work provided for in the curriculum for mastering a specific subject.

The student's independent study load is an integral part of the educational work provided for in the curriculum for mastering a specific subject. Student's independent learning comprises a set of educational activities carried out both in and outside the classroom (excluding the classroom hours allocated in the teaching load) in the form of independent work under the direct supervision of the teacher or the student's independent study of topics within the subject (module) [9].

RESULTS

The main requirement of society for modern education is the formation of an individual capable of independently and creatively solving scientific, industrial, and social problems, thinking critically, developing and defending their point of view and beliefs, systematically and continuously supplementing and updating their knowledge, improving skills through independent learning, and creatively applying them in life. One of the most convenient and proven ways to increase the effectiveness of knowledge acquisition and activate



students during lessons is the effective organization of independent learning work. It occupies a special place in modern lessons, as students acquire knowledge only through personal independent learning activities.

To form a holistic and harmonious personality, it is necessary to systematically incorporate a special type of educational task into the process of independent work - independent activity that has the character of problem-solving and inquiry. There are various approaches to studying the nature of students' activity and independence in education.

Researcher R.M. Mickelson understood independent work as "the completion of tasks by students without any assistance, but under the teacher's supervision," while the teacher can switch to collective exercises when difficulties arise. Often, this type of independent work was used when students completed their homework. However, this definition was criticized because the author did not pay due attention to the internal aspect of students' independent work, which manifests in the independence of thoughts and conclusions.

A group of authors (N.G. Dairy, R.G. Lemberg) attempted to reveal the internal features of independent work related to the structure of students' cognitive activity in the learning process. First and foremost, this refers to the manifestation of students' independence in performing various exercises and tasks. These researchers considered this work as a means of fostering students' independence and as a form of organizing their cognitive activity. This work requires activity, creativity, and initiative in problem-solving. Work on completing various tasks begins with students' desire to demonstrate their activity. A mandatory condition is the students' understanding of the purpose and meaning of the exercise [9].

Russian researcher M.A. Danilov believes that students' solution of cognitive tasks and problem situations is the main criterion for independent work. Students seek new ways to solve them, acquiring new knowledge and deepening existing ones [11].

According to another Russian researcher A.I. Zimnyaya, independent work is "a purposeful, internally motivated work compiled by the students themselves in the set of performed actions and adjusted by them according to the process and result of the activity" [10]. Its implementation requires sufficiently high self-awareness, reflection, self-education, personal responsibility, and provides satisfaction to the student as a process of self-improvement and self-awareness." A.I. Zimnyaya [10] emphasizes that a student's independent work is the result of their properly organized learning activities in the lesson, which motivates them to expand, deepen, and continue independently in their free time. Summarizing all of the above, the following can be attributed to the main features of students' independent work:

- External signs of students' independence in completing tasks are the ability to plan their work, complete tasks without the teacher's direct assistance, and evaluate the result of their work;
- Systematic self-monitoring of students' work results, correction and improvement of its execution methods;

- A cognitive task that encourages students to engage in independent mental activity, the presence of a problem situation;

- The manifestation of independence and creative activity by students in solving cognitive tasks;

- Inclusion in the assignments for independent work of material, the assimilation of which contributes to the comprehensive development of the student's personality, independent learning and creativity.

Analyzing all possible approaches, we can adopt the following definition as a basis: independent work is a type of educational activity in which students, possessing a certain degree of autonomy, perform various tasks with partial support from the teacher, when necessary, expend the required mental effort on this, and demonstrate skills of self-control and self-correction.

In the course of our research, we attempted to study the preliminary experience of implementing the credit-module system in pedagogical higher education institutions of Uzbekistan.

Students were given questionnaires to determine their knowledge and opinions about the credit-module system. The survey results showed that the introduction of the credit-module system has led to a number of positive changes:

Students' independence: 75% of students expressed satisfaction with the opportunity to adapt their educational paths through the new system.

Freedom of subject choice: 60% of students noted that they have the opportunity to choose subjects that correspond to their interests through the credit-module system.

International cooperation: The implementation of the system has increased interest in international student exchange programs.

According to the research results, the credit-module system serves to achieve the following main outcomes:

1. Academic flexibility: Students had the opportunity to choose their individual educational trajectory.
2. Development of independent learning competence: Students' motivation to independently deepen their knowledge increased.
3. International flexibility: Uzbekistan's education system is being harmonized with international requirements, achieving recognition of student credits in other countries.
4. Qualitative changes in faculty activities: The educational process is organized based on modern technologies and innovative methods.

However, problems were noted in the implementation of the credit-module system. Below, we will examine the challenges we face:

Teacher preparation: 40% of teachers reported experiencing difficulties adapting to the new system.

Technical difficulties: There are technical problems when creating class schedules and calculating credits.



Student adaptation: 30% of students stated they could not adapt to the new system.

The introduction of the credit-module system is an important step in the development of Uzbekistan's higher education system.

However, the research results show that for the full implementation of this system, it is necessary to address the following issues:

- Strengthening promotional and advocacy work to enhance students' and teachers' understanding of the system's essence.
- Further development of information technologies and electronic educational resources.
- Organizing special professional development courses for teachers on the credit-module system.

The challenges of organizing independent learning highlight several important possibilities of ICT:

- 1) ICT allows for the creation of a completely new educational environment that activates students' independent work, optimizes the learning process, and reduces the time for mastering a complex of knowledge and skills;
- 2) students can assimilate the educational material not only within the framework of the class schedule but also at any convenient time;
- 3) ICT allows significantly reducing the number of classroom sessions and increasing the time allocated for independent learning activities;
- 4) means of organizing education in the context of independent learning include not only traditional educational and scientific literature printed on paper but also various types of electronic educational resources;
- 5) independent work not only with information databases and knowledge bases but also with audiovisual information, virtual laboratories, creating simulation, graphic, and digital computer models, training programs, and testing tools is becoming increasingly important;
- 6) students' independent work is monitored by the teacher through email, website, internet; it becomes possible to organize feedback between the student and the teacher;
- 7) purposeful use of ICT in independent work creates conditions for establishing an interactive dialogue between the user and the information system, carried out through multimedia.

The introduction of the credit-module system is an important step for higher education in Uzbekistan. However, for successful implementation, it is necessary to organize professional development courses to support teachers in adapting to the new system. Further strengthening of explanatory work with students on the advantages and application of the credit-module system will allow them to acquire clear understanding of it. It is necessary to study the experience of implementing the credit-module system in Europe and other countries and to carry out practical work on adapting it to local conditions.

The study showed that the credit-modular system has great potential for further development of Uzbekistan's education

system and competitiveness at the international level. However, further improvement and enhancement of the system's effectiveness require additional research and practical measures.

Drawing a general conclusion from the research results, we considered it necessary to recommend work in the following main areas:

1. Developing students' approach to independent learning
 - More detailed explanation of the fundamentals of the credit-module system. It is necessary to give students a comprehensive understanding of the credit-modular system, its significance and goals, explain how each module in this system helps students develop independent learning, teach students to correctly interpret the module program, and plan based on it.
 - Defining tasks for independent learning in the educational process. For this, it is necessary to familiarize students with the purpose, content, and requirements of each module, assign tasks for self-management and independent learning, and teach them to approach achieving the goals and intended outcomes of the module and to create a plan.
2. Increasing students' motivation and teaching goal-setting
 - Demonstrate to students the benefits of the credit-module system:
 - Explain to students the uniqueness of each module and its usefulness for them. Through this, students feel responsible for their learning process and are motivated to work effectively.
 - Teach which approaches should be used to master and maximize the use of each part of the module.
 - Develop students' goal-setting, planning, and self-assessment skills. Improve students' independent learning competence through teaching self-management methods.
 - Teach clear goal-setting and planning.
 - Train in setting SMART goals.
 - Teach students the SMART (Specific, Measurable, Achievable, Relevant, Time-bound) method, that is, teach them to set specific, measurable, achievable, important, and time-bound goals.
 - Organize practical classes for students in which they will need to formulate their educational goals using the SMART method.
 - Identify resources to achieve the goal.
 - Teach students to identify the necessary resources (books, online courses, materials, etc.) to achieve their goals. Provide recommendations on the correct selection of resources and their effective use.
3. Implementing effective teaching resources and methods in the educational process.
 - Creation of interactive educational resources and online materials:
 - Under the credit-modular system, students can use online courses, video lessons, tests, and guides for independent study through interactive platforms. Also, provide students with opportunities for self-assessment.
 - Interactive organization of modules on Moodle or other educational platforms, supporting students in completing independent work.
4. Strengthening mentorship and individual approach.
 - Implementation of a mentoring system:



• Mentorship from experienced teachers or academic advisors to help pedagogical students develop their knowledge and skills independently. Mentors work individually with students, providing them with advice and recommendations on achieving the module's objectives.

Although the introduction of the credit-module system in Uzbekistan's higher education institutions is in its initial stages, it is already showing positive results. Students' ability to learn independently has increased, their choice of subjects has expanded, and opportunities for international cooperation have improved. However, issues such as teacher training, technical difficulties, and student adaptation must be addressed. For the successful implementation of the credit-module system, close interaction between higher education institutions, the state, and international partners is necessary.

CONCLUSION

Numerous examples of the aspects, components, and advantages of the credit-modular system implemented in higher education have been presented above. We have seen from the examples provided that this system is interpreted differently in different countries. The credit-modular system, adopted by many countries and currently in operation, does not have universal, uniform criteria for all. However, thanks to the widespread implementation of this system, a clear and unified higher education system is being created, and free academic mobility is being introduced to ensure the quality of education. The transition of our country's higher education institutions to the credit-modular system aims to keep pace with the most advanced achievements in education, adapt education to international standards requirements, and thereby ensure the quality of education. In an educational institution where quality education is provided, competitive personnel with modern knowledge are developed, and this circumstance has a direct positive impact on the development of society. As we strive to elevate our country to the ranks of developed nations, the positive changes taking place in every sphere lead us toward this goal. Initiating these positive changes in education is the most crucial task. Therefore, we must continuously develop international experience in the field of education, carefully studying it.

LIST OF REFERENCES

1. Decree of the President of the Republic of Uzbekistan dated October 8, 2019 "On measures to further improve the higher education system."
2. Decree of the President of the Republic of Uzbekistan dated October 8, 2019 No. UP-5847 "On approval of the Concept for the development of the higher education system of the Republic of Uzbekistan until 2030."
3. The Model Regulation "On the Procedure for Organizing, Monitoring, and Evaluating Students' Independent Work," approved by the order of the Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan dated February 21, 2005, No. 34 "On Organizing Students' Independent Work."
4. Urinov V., Umarov A., "ECTS Credit-Module System in Higher Education Institutions of the Republic of Uzbekistan," Canada, 2020
5. Usmanov B.Sh., Khabibullaev R.A., "Organization of the educational process in higher educational institutions on the credit-modular system," Tashkent, 2020
6. Textbook on the module "Credit-module system and organization of the educational process," Tashkent, 2020
7. Bologna Declaration. The European Higher Education Area. 1999
8. International education systems and Uzbekistan's experience. Tashkent: National University of Uzbekistan Publishing House, 2021
9. Smith, J. Credit-Module System in Higher Education: Challenges and Opportunities. Journal of Educational Reform, 15 (3), 2020
10. Zimnyaya, I. A. Fundamentals of Pedagogical Psychology: a textbook for students of II-V courses / I. A. Zimnyaya, E. I. Savonko, I. A. Petukhova [et al.]. - Moscow: Moscow Pedagogical Institute of Foreign Languages named after M. Torez, 1980
11. Students' Independent Work: Types, Forms, Assessment Criteria: Textbook / S. V. Kunshchikov, T. I. Grechukhina, A. V. Merenkov [et al.], under the general editorship of T. I. Grechukhina. - Yekaterinburg: Ural Federal University Publishing House named after B. N. Yeltsin, 2016
12. Davydova O.V., Zvonnikov V.I., Chelyshkova M.B., "Methodological Recommendations for the Implementation of the Credit System in Higher Educational Institutions," Moscow, 2010
13. Ualiyeva N.T. The state of students' independent work at the university and directions for its effective organization // Innovations in Education: Searches and Solutions: Proceedings of the II International Scientific and Practical Conference. - Volume II. - Astana, 2015