PLANNING THE PROCESS OF DEVELOPING INTELLECTUAL ABILITIES OF STUDENTS IN THE CREDIT MODULE SYSTEM

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Annatation: *The contemporary education system is witnessing a paradigm shift, moving away from traditional methods of teaching towards a more student-centric approach. One of the significant developments in this regard is the implementation of the Credit Module System, which provides flexibility and diverse learning opportunities to students. In this system, designing the processes for developing the intellectual competence of students becomes pivotal. Intellectual competence not only refers to the acquisition of knowledge but also the ability to critically analyze, synthesize information, and apply it to real-world situations.*

Key words: *Intellectual Competence, Development, Credit Module System, Student Learning, Design, Educational Processes, Pedagogy, Cognitive Skills Enhancement, Educational Planning, Assessment Methods, Skills Developmentю*

INTRODUCTION.

"The Concept of Development of the Higher Education System of the Republic of Uzbekistan until 2030" outlines specific tasks such as integrating digital technologies and modern teaching methods into higher education processes, expanding youth involvement in scientific activities, combating corruption, enhancing the nation's profile in engineering and technical education, implementing a credit-module system, and improving practical skills in the curricula of specialized fields[1].

According to the Presidential Decree issued on October 8, 2019, 85% of higher education institutions in the country are planned to transition to the credit-module system by 2030 in accordance with this approved concept. In the coming years, nearly all higher education institutions in the country will begin operating under the credit-module system.

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[1] Decision of the President of the Republic of Uzbekistan Shavkat Mirziyoyev dated April 20, 2017 "On measures to further develop the higher education system".

The credit-module system is a process of organizing education that combines modular teaching methods and assessment models based on credit measurement. It is a comprehensive and complex process. The credit-module system emphasizes two main issues: ensuring students' independent work and evaluating students' knowledge based on a rating system.

In the "Concept for the Development of the Higher Education System of the Republic of Uzbekistan until 2030," specific tasks have been outlined, including implementing digital technologies and modern teaching methods in higher education processes, increasing youth engagement in scientific activities, combating corruption, enhancing the nation's profile in engineering and technical education, implementing the credit-module system, and improving practical skills in specialized fields through practical exercises based on expertise[2].

The "Concept for the Development of the Higher Education System of the Republic of Uzbekistan until 2030," approved by the Presidential Decree on October 8, 2019, outlines that 85% of the country's higher education institutions are planned to transition to the step-by-step credit-module system by 2030. In the coming years, nearly all higher education institutions in the country will start operating under the credit-module system.

The credit-module system is a process of organizing education that encompasses modular teaching methods and an assessment model based on credit measurement. It is a comprehensive and complex process. Two main issues are emphasized in the credit-module system: ensuring students' independent work and evaluating students' knowledge based on a rating system.

Based on foreign experience, the educational process in the credit-module system consists of 2-4 modules per semester[3]. Modules are structured by gradually progressing from simple to complex subjects, starting from theoretical and methodological subjects to practical subjects, and are designed based on the principle of mutually complementing each other logically. For a student to specialize, it is required not only to acquire information but also to possess skills in revising and applying them practically.

LITERATURE ANALYSIS.

Educational programs based on modules are developed according to a specific scheme and encompass the following aspects:o'quv maqsadi hamda vazifalarning to'liq ochib berilishi:

• The skills required for a student to start and successfully complete the subject (course) and progress further;

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[2] Law of the Republic of Uzbekistan "On Education". Tashkent, 2020, 23.09

[3] Charles K. Alexander Matthew N.O. Sadiku "Fundamentals of Electric Circuits" NEW YORK, 2014.-458 p.

- Brief content of each subject included in the module (syllabus), meaning topics for lectures, the outline of seminars and practical exercises, assignments designed for independent learning and assessment;
- A brief description of teaching methods and tools, as well as methods and forms of evaluating knowledge.

In the modular teaching system, students' knowledge, skills, and understanding are assessed using a rating system. In this system, all of a student's learning activities, both inside and outside the classroom, are evaluated through assigned grades.

Moreover, in higher education, it is essential for young professionals who are undergoing specialization in their respective fields to be able to independently pursue activities related to their areas of expertise. They are expected to be competitive individuals who can operate independently, actively engage in self-reflection, and form independent opinions. Fostering independent learning during the educational process is crucial. The issue of independent learning involves the selection and implementation of ways to set goals, achieve them, self-monitor, and evaluate, which are chosen and performed by the student[4].

In the current era, the educational process in higher education is directed towards the comprehensive development of specialists. It requires a systematic approach to shaping the expertise, skills, and abilities of professionals and aims to enhance students' knowledge activities and management skills. Higher education demands a well-organized, comprehensive system that fosters students' understanding, efficient information acquisition, creative thinking, intellectual capacity development, logical analysis, and thorough revision of information.

One of the essential conditions for organizing the educational process in line with modern requirements for professional development is the active promotion of students' independent learning activities. The content of independent learning forms the basis for the system of independent learning. Independent learning content includes educational materials, the activities of educators, and learners. In this context, the interaction between the teacher and the student plays a fundamental role.

The main means of independent learning are independent learning materials. They constitute a structured system, differing from textbooks, teaching methods manuals, and lecture texts. They provide clear and substantive guidance, managing the student's cognitive activity, guiding them towards independent reading, self-direction, self-monitoring, self-expression, and self-assessment in their personal knowledge activities. Psychological and pedagogical recommendations are available for self-assessment[5].

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[4] John Bird. "Electrical and Electronic Principles and Technology" LONDON AND NEW YORK, 2014.-455 p

[5] Avliyakulov N.Kh. Modern teaching technologies. - Tashkent, 2001.

Independent learning materials include educational and methodological manuals, lecture texts, computer programs, audio and video materials, recommendations for using existing traditional textbooks, and other sources of information. Independent learning materials are classified based on several criteria:

According to the description of the learning material:

- Core knowledge and information obtained from textbooks, teaching and methodological manuals;
- Additional materials;
- Exemplary lecture texts, etc.

According to the volume of educational information:

- The scope of information based on the subject matter being studied;
- The total volume of information regarding the subject of study.

Materials related to information technology. By term of use: Materials distributed to learners for one-time use; Materials that can be used several times in training. Independent learning materials and student-teacher communication are the leading components in the process of independent learning. The level of interaction between these two components helps to balance open learning models. It should be noted that many students have never had the problem of working independently with self-study materials before. Independent educational materials, unlike textbooks, educational and methodical manuals, have a complex nature in terms of structure.

Practice shows that many students cannot objectively assess their ability to work with independent educational materials during the study process. These assessments are always personal (subjective). A serious problem arises as to how to ensure the impartiality of this process. It is necessary to develop, define, justify and demonstrate the use of criteria for evaluating the ability of students to work independently with independent educational materials[6].

Each learner chooses criteria based on his/her self-assessment and readiness to adjust or organize his/her activities. Today, developed countries have accumulated a lot of experience in using pedagogical technologies that increase the educational and creative activities of students and guarantee the effectiveness of the educational process, and interactive methods form the basis of this experience. The student mainly demonstrates the knowledge he has mastered, and the teacher listens to his thoughts, where necessary, the teacher-student interview participants in traditional education ask questions.

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[6] Boltaeva M.L. Development of independent educational activities of students in the process of physics education. Ph.D. ... thesis. Tashkent. TDPU. 2004.

RESEARCH METHODOLOGY.

The student group (community) in this situation becomes a passive participant, listener. At first glance, the reception of information transmitted by a student or teacher creates the impression that the student group (community) creates an opportunity to acquire knowledge. However, the results of psychological research show that knowledge (information) received in this way is quickly forgotten. In particular, according to the studies of American psychologists R. Karnikau and F. McElroy, the natural physiological and psychological capabilities of a person allow to preserve acquired knowledge in different ways[7].

One of the important requirements for the organization of modern education is to achieve high results in a short time without spending too much mental and physical effort. Forming specific skills and competencies based on the delivery of specific theoretical knowledge to students in a short period of time, monitoring their activities, evaluating the level of theoretical and practical knowledge acquired by them requires high pedagogical skills and a new approach to the educational process from the teacher. . The introduction of new pedagogical technologies into the educational process is emphasized in the "National Personnel Training Program".

Pedagogical technology is a systematic approach to the educational process, in which technical and human capabilities are taken into account in the organization of the educational process, and their interaction is the basis for creating optimal forms of education. Pedagogical technologies can be divided into the following components: - education - social requirements imposed on the person of education participants; - professional training of members of cooperative activities; - the purpose, content, essence, means of implementation of the educational process; - differentiation of the educational process; - creativity[8]. That is, a person: 10% when he reads the source himself; 20% when he heard the information; 30% when he sees an incident, event or process; 50% when he saw the incident, event or process and heard information about them; 80% when he/she transmits information (speaks, demonstrates knowledge) by himself/herself; when he applies the acquired knowledge (information, information) to his activities, he has the ability to remember 90% of the information.

In order to develop logical thinking in students, it is necessary to form thinking characteristics. The learning process is activated based on thinking operations. This teacher: why?, for what purpose?, what are the reasons?, why was the result like that? can be done through discussion of questions like Involvement of teachers in heuristic, problematic situations, discussion of criticism, doubts, creation and protection of their own projects to independently find problems in them and solve them serves to make students' thinking meaningful and productive.

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[7] Muslimov N.A., Kuysinov O.A. Organization of independent education in the training of vocational education teachers. Methodical guide. Tashkent: TDPU. 2006.
[8] https://daryo.uz/k/2020/08/13/

Formation of skills and competences not only acquiring knowledge but also forming various skills and competences. An automated method of behavior resulting from training. Physiologically, the skill is formed in the cortex of the large hemispheres of the brain and ensures the functioning of the stable system of temporal nerve connections. The conditions for creating dynamic-stereotypes simultaneously create a complex analytical-synthetic activity with an automated act. As a result, not only skills, but also competencies[9].

One of the unique methods of organizing the educational process is business games. Business games help to model the system of relations, to organize the characteristics of activity. According to the educational activity of learners, the following methods of education are distinguished:

- The method of explanatory instruction is a reproductive method in which the activity is carried out by the teacher. Students get knowledge and get to know each other during the educational process. This method is one of the most common methods, and there are certainly improved methods. This is programmed learning.
- Reproductive method - in this method, the student works, in which the student restores the given knowledge in memory and accepts the received knowledge as a copy.
- Problem-based learning method - organized by the teacher, it has a productive character. Through this method, the student develops knowledge and skills. One of the ways to improve this method is to organize business games.
- Partial research method is a method organized under the supervision of the teacher, which also has a productive character, in which the student creates.
- The research method is a method of education organized without the help of the teacher, and it requires the student's independent research, thinking and transformation of knowledge.

Independent and critical thinking is necessary in creative work, which ensures the productivity of mental activity. In the process of education, non-traditional methods prepare the ground for all-round development of the student's personality. It is worth noting that the students whom we are educating today are of great importance in determining the future and destiny of our country[10].

Before delving into the design aspects, it is crucial to comprehend the Credit Module System. This system allows students to earn credits by successfully completing individual modules or courses. These credits are transferable and accumulate towards a degree. The flexibility of this system empowers students to choose from a wide array of courses, enabling them to explore diverse subjects and tailor their education according to their interests and career goals.

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[9] Ishmuhamedov R, Yuldashev M. Education and training, innovative pedagogical technologies. - Vol. 2013, p. 272.

[10] Madumarov T, Kamolidinov M. Basics of innovative pedagogical technology and its application in the educational process: methodical guide. -T "Talqin", 2012, p. 144.

One of the key features of the Credit Module System is the ability to customize learning paths. Designing the processes to enhance intellectual competence involves creating a robust framework where students can select modules that align with their interests. Institutions should offer comprehensive guidance and counseling services to help students make informed decisions. Moreover, integrating interdisciplinary modules fosters holistic learning, encouraging students to explore multiple disciplines and gain a broader perspective.

Intellectual competence flourishes in an environment that promotes active and collaborative learning. Traditional lectures are being complemented, if not replaced, by interactive sessions, group discussions, case studies, and hands-on projects[11]. These methods stimulate critical thinking, encourage students to articulate their thoughts, and engage in debates, thereby enhancing their analytical and communication skills. Collaborative projects foster teamwork and problem-solving abilities, crucial components of intellectual competence.

Under the Credit Module System, emphasis should be placed on research and inquiry-based learning. Students must be encouraged to delve into independent research, formulate hypotheses, gather and analyze data, and draw conclusions. Such experiences not only deepen their understanding of a particular subject but also instill a sense of curiosity and intellectual curiosity. Mentoring by faculty members plays a pivotal role in guiding students through the research process, teaching them valuable skills of inquiry and analysis.

Designing effective assessment methods is vital for nurturing intellectual competence. Assessments should not only test rote memorization but also evaluate students' ability to think critically, solve problems, and apply knowledge. A mix of assessments, including essays, presentations, quizzes, and practical demonstrations, ensures a holistic evaluation. Additionally, timely and constructive feedback is essential. Feedback mechanisms, such as peer evaluations, self-assessment tools, and faculty feedback, provide valuable insights to students, helping them understand their strengths and areas for improvement.

Incorporating technology into the learning process enhances intellectual competence in multiple ways. Virtual laboratories, online simulations, and interactive multimedia resources provide students with practical exposure, bridging the gap between theory and practice. Moreover, online platforms facilitate collaborative learning beyond the confines of classrooms. Discussion forums, webinars, and online workshops connect students with experts and peers worldwide, exposing them to diverse perspectives and enhancing their analytical skills[12].

Intellectual competence is incomplete without honing critical thinking and creativity. Students should be encouraged to question assumptions, challenge existing paradigms, and think outside the box. Problem-based learning scenarios, debates on contemporary issues, and exposure to real-

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[11] Muslimov N. Usmonboyeva M, Sayfurov D. Innovative educational technologies. Educational and methodological manual. Tashkent-2015. p. 144.
[12] Ziyamuhamedov B. Pedagogy. Study guide.T. "Civilization". 2014.200-372.

world challenges foster critical thinking. Creativity can be nurtured through arts, music, literature, and innovative projects. Integrating these elements into the curriculum enriches students' intellectual experiences, enabling them to approach problems with innovative solutions.

Developing intellectual competence extends beyond academic knowledge; it encompasses ethical reasoning and a global mindset. Integrating modules on ethics and moral reasoning encourages students to consider the ethical implications of their actions, decisions, and solutions. Exposure to diverse cultures, international collaborations, and global issues enhances their global perspective. Encouraging community engagement and social responsibility instills empathy and a sense of purpose, nurturing well-rounded individuals capable of contributing meaningfully to society.

Designing the processes for developing the intellectual competence of students under the Credit Module System is a multifaceted endeavor. It involves customizing learning paths, promoting active and collaborative learning, integrating research-based approaches, designing effective assessment methods, leveraging technology, cultivating critical thinking and creativity, and instilling ethical and global perspectives.

ANALYSIS AND RESULTS.

When these elements are thoughtfully integrated into the educational framework, students emerge not only with a wealth of knowledge but also with the ability to think critically, adapt to diverse situations, and contribute positively to the world around them[13]. Institutions, educators, and policymakers must collaborate to create an environment where intellectual competence is not just a goal but a fundamental aspect of education, empowering students to thrive in an ever-changing global landscape.

- The Credit Module System revolutionizes education by providing flexibility and diversity in learning opportunities. Developing the intellectual competence of students within this framework involves several crucial elements.
- Customized Learning Paths: The system empowers students to tailor their education according to their interests. Comprehensive guidance services and interdisciplinary modules enhance their learning experience, offering a broader perspective.
- Active and Collaborative Learning: Interactive sessions, group discussions, and hands-on projects stimulate critical thinking and teamwork. Collaborative projects nurture problem-solving abilities, vital components of intellectual competence.
- Research and Inquiry-Based Learning: Encouraging independent research instills curiosity and analytical skills. Faculty mentoring guides students through the research process, teaching them valuable inquiry and analysis skills.

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[13] Zunnunov A.- "Theory of Pedagogy". Tashkent, "Alokachi", 2006.

- Effective Assessment Methods: Assessments should evaluate critical thinking, problem-solving, and application of knowledge. A variety of assessments, coupled with timely feedback, provides insights for improvement.
- Integration of Technology: Technology bridges the gap between theory and practice. Virtual labs and online platforms facilitate collaborative learning, connecting students with experts worldwide and enhancing their analytical skills.
- Cultivating Critical Thinking and Creativity: Problem-based learning, debates, and exposure to real-world challenges foster critical thinking. Creativity is nurtured through arts, music, literature, and innovative projects, encouraging innovative solutions.
- Ethical and Global Perspectives: Integrating ethics modules and promoting global awareness ensures students consider ethical implications and understand diverse cultures. Community engagement instills social responsibility, creating well-rounded individuals.

In this dynamic system, institutions, educators, and policymakers collaborate to create an environment where intellectual competence is fundamental. By incorporating these elements, students not only gain knowledge but also develop critical thinking, adaptability, and empathy, preparing them for the complexities of the modern world.

The Credit Module System has redefined the landscape of higher education, offering students flexibility and diverse learning experiences. Within this innovative framework, student teaching plays a pivotal role in shaping the future educators of tomorrow. This essay explores the unique challenges and opportunities presented by student teaching in the Credit Module System, emphasizing the importance of practical experiences, mentorship, and adaptability in preparing aspiring teachers for the complex demands of modern classrooms[14].

In the Credit Module System, student teaching goes beyond the traditional boundaries. It allows aspiring teachers to immerse themselves in various educational contexts, gaining exposure to diverse teaching methods, student populations, and curricula. This diversity of experiences enhances their adaptability, a crucial trait in the ever-evolving educational landscape. Through multiple teaching placements, students can explore different age groups, subjects, and educational philosophies, enabling them to discover their strengths and preferences as educators.

The flexible nature of the Credit Module System empowers student teachers to customize their learning paths. They can choose modules that align with their specific areas of interest, allowing for a more personalized and enriching educational experience. Moreover, mentorship in this system is not confined to a single classroom or teacher. Student teachers can benefit from the guidance of multiple mentors across various disciplines and educational settings, providing them with a holistic perspective on teaching practices and pedagogies.

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[14] Zunnunov A., and others - "History of Pedagogy" Study guide for higher educational institutions. - Tashkent, "Sharq" printing concern, 2000.

In the Credit Module System, student teaching experiences often incorporate interdisciplinary approaches. This means future educators are encouraged to integrate knowledge from various fields into their teaching methods. For instance, a student teacher specializing in history might incorporate elements of drama or technology to make historical events come alive for their students. This interdisciplinary approach not only makes learning engaging but also prepares teachers to address the interconnected nature of knowledge in the real world.

Furthermore, student teaching in the Credit Module System emphasizes real-world application of theoretical knowledge. Students are encouraged to design innovative lesson plans, incorporating technology, experiential learning, and collaborative activities. This approach equips them with the skills necessary to create dynamic and interactive classroom environments, fostering active student engagement and deepening the learning experience.

The Credit Module System places a strong emphasis on communication and collaboration. Student teachers are encouraged to engage in dialogue with peers, faculty, mentors, and, most importantly, students. Through group projects, presentations, and interactive teaching methods, aspiring educators refine their communication skills. They learn to convey complex ideas in accessible ways, a vital skill in effective teaching. Moreover, collaboration with colleagues and students fosters a sense of community within educational institutions, promoting a supportive learning environment[15].

The fast-paced changes in education demand teachers who are not only knowledgeable but also adaptable. Student teaching in the Credit Module System cultivates adaptability by exposing future educators to various teaching methodologies, technological tools, and classroom environments. As they navigate diverse modules and teaching experiences, they develop resilience and problem-solving skills, enabling them to thrive in any educational setting.

Additionally, the Credit Module System instills a culture of lifelong learning. Student teachers are encouraged to stay updated with the latest educational research, teaching techniques, and advancements in their respective fields. The system promotes continuous professional development, ensuring that educators are well-equipped to meet the evolving needs of their students and the educational system as a whole.

Conclusion:

Student teaching in the Credit Module System is a transformative experience that prepares aspiring educators to navigate the complexities of modern classrooms. By providing practical experiences, tailored mentorship, interdisciplinary approaches, and a focus on communication and collaboration, this system equips future teachers with the skills and knowledge necessary to excel

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[15] Munavvarov A.K. Under the editorship of "Pedagogy". Tashkent. "Teacher". 1996.

in their profession. Moreover, it instills adaptability and a commitment to lifelong learning, ensuring that educators remain innovative and effective throughout their careers.

As the educational landscape continues to evolve, student teaching in the Credit Module System stands as a beacon of progressive pedagogy, shaping passionate, adaptable, and lifelong learners who are dedicated to nurturing the next generation of leaders and thinkers. Through this innovative approach, the future of education shines brighter, promising a generation of educators who are not just teachers but mentors, facilitators, and inspirations in the lives of their students.

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