

**RESEARCHING TO USE OF SELF-CONTROL SYSTEMS IN TEACHING  
INFORMATION TECHNOLOGY AT A UNIVERSITY**

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**Abstract:** The work done on the use of self-control systems in teaching information technology in higher educational institutions is analyzed, the shortcomings of traditional methods of assessing student knowledge were studied, the effect of using computer control on the solution of assignments was explained.

**Key words:** Higher education, learning efficiency, knowledge assessment methods, teaching methods, traditional control methods, innovative resources, distance education.

**Introduction.** A continuous practice of self-regulation can subvert the pervasive stress both students and teachers experience in the classroom. A self-regulated teacher can also serve as a model for students to label and express emotions in a way that is effective, kind, and conducive to an optimal learning environment. If we consider a higher education institution as a management system, special attention should be paid to testing the skills and knowledge of students. In order to improve the management of the educational system, it is necessary to objectively analyze innovative resources used in educational institutions, evaluate the feasibility and effectiveness of their use in the educational process, including for the purpose of monitoring knowledge. Today, many methods, systems and technical means are used to control knowledge. At the same time, it is impossible to identify an optimal and universal form of control for all educational institutions. The choice of control method depends on a number of factors: the goals of the program developer, the tasks of the teacher of a particular subject, the financial and organizational capabilities of the educational institution, as well as the specific characteristics of the higher educational institution, the content of individual subjects.

Despite the possibility of partially automating this process, decision-making traditionally falls almost entirely on the teacher and causes a number of disadvantages. The widespread introduction of automation tools for the knowledge testing process will help solve some problems in the higher education system [1].

Automation of decision making in the field of knowledge assessment is usually carried out through testing. They have a number of important advantages over traditional forms of control. Test-based assessment of students' knowledge differs from traditional assessment in that they are based on objective empirical criteria rather than on the subjective opinion of the teacher. The advantages of the test include coverage of a large number of students, time control, and coverage of all topics in a particular subject. When using a test system to assess knowledge, it is important to fulfill the requirements that ensure the quality of the test, such as increasing the complexity of test questions, changing their sequence, and correct distribution of time. The teacher must correctly formulate tests on the subject and be able to compose them [2,3,4].

The disadvantages of such a control system include the following: control of knowledge testing requires a lot of effort from the teacher; if the teacher, due to human factors, makes an error when compiling test keys, students will not be assessed impartially; technical failures in the

system can also be observed during interactive knowledge control. Another disadvantage of the test is that the ticket contains a list of possible answers to a particular question, from which you must choose the correct one. Sometimes students manage to mark the correct answer “by chance.” Therefore, some students may receive inappropriate grades. In addition, test tasks cannot reveal the uniqueness of students’ personality and thinking. To eliminate such shortcomings, if open-ended tasks are included in test questions, each student independently presents a logical answer to the question and tries to explain it specifically. This takes a lot of time from the teacher, since testing the skills acquired by the student is not even partially automated [5].

Today, information technologies are an integral part of the educational process. To ensure quality education for students, modern information technologies are needed, which are a product of scientific and technological development and its material basis, the creation of electronic textbooks and teaching aids using computer services and the Internet, resources and software for distance learning remain a requirement of the time. But in recent years, with the development of distance education, the shortcomings of assessing students only using test systems have begun to appear. A number of reasons can be given for this. The fact is that when taking test systems remotely, there is no way to check that you filled it out yourself. The fact is that the student who has completed the test tasks does not yet have a sufficient number of practical skills and competencies.

Automation of the learning process and knowledge control undoubtedly provides a number of important advantages: saving time, convenience, online mobile communication between teacher and student. Allocation of assignments to students based on options by teachers on distance education platforms and objective assessment by the teacher after assignments are submitted by students on these platforms requires a lot of time and resources. In this case, human factors quality may make mistakes or fail to perform timely inspections [6].

The urgency of reforming the education system in order to increase efficiency requires competent management of this process. Effective management, in turn, cannot be realized without knowledge control. Teachers in the subject Information Technology are forced to spend a lot of time checking individual assignments given to students to work on application programs and create a program that fulfills a specific purpose. In this regard, today, the development and implementation of high-tech automated knowledge management systems is an urgent need for all educational institutions in our country. Taking into account these situations and the partial elimination of shortcomings, our proposed idea is that for remote learning it is enough for the teacher to compose and distribute tasks, for students to complete the tasks on time, and the automated control system to perform the function of checking tasks and assessing knowledge, without the participation of the human factor. This verification system is especially useful in a credit-module learning system. Thanks to the implementation of an automated control system, teachers save time when checking each completed work. This will allow you to control a large number of students or deepen control. Testing knowledge and skills through practical tasks completed by students awakens in them responsibility in mastering the subject and ensures their becoming qualified personnel. Based on this, the following results are expected:

- increasing the completeness of assessment and verification of the method of current and intermediate control tasks completed by students;
- by observing the student’s task completion trajectories, it makes it possible to evaluate the technology of the solution, but not based on its final result;

- by giving the student the opportunity to solve his mistakes while completing assignments, his full ability can be assessed;
- the efficiency of testing the knowledge and skills of students of technical universities is increased.

**Conclusion.** One of the most important aspects of any educational activity is the system of knowledge quality control. However, the discrepancy between the capabilities of traditional teaching methods and the amount of actual knowledge that modern society demands from graduates of educational institutions indicates a problem in the system of modern higher education. Therefore, the issues of computer training and knowledge control are of interest for many researchers, in the field of both education and information technologies.

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