

USING THE AIREN TESTING PROGRAM TO CONTROL STUDENTS'  
KNOWLEDGE

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**Abstract:** The possibilities of computer tests developed in the Airen system are considered. The main types of test tasks in the system are outlined: tasks with a choice of one or more answers, tasks with the input of an answer, tasks for correspondence, for ordering and classification. It is shown that the Airen system is a powerful tool in the preparation of tests and in testing. The process of preparing tests in the Airen system is considered in sufficient detail.

**Keywords:** Knowledge control, training test, testing program, Airen software package.

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Informatization of education in Uzbekistan involves the creation and implementation of a fundamentally new education system, educational space based on the creation and dissemination of new information systems [1]. Modern information technologies have become a necessary and important tool for the modernization of higher education. One of the computerized systems for organizing knowledge control that is widespread today is test control of knowledge.

The Action Strategy for the Further Development of the Republic of Uzbekistan defines as a priority the task of "Improving the quality and efficiency of higher educational institutions based on the introduction of international standards for training and assessing the quality of teaching", the successful implementation of which involves improving the indicators for assessing the quality of education and the organizational mechanism for monitoring the quality of teaching. Today, higher professional education is not only an educational process in its typical sense, but also an opportunity for a student to reveal certain abilities in himself, to strive through education and self-education to an innovative way of developing his own personality [2].

The control of knowledge, skills and abilities of students is one of the main elements of the educational process. The degree of assimilation of educational material by students is the main goal of test control, which allows the teacher to flexibly and continuously manage the learning process [3].

The actual problem of improving the educational process as a whole implies the improvement of control in teaching informatics.

Speaking about the discipline "Information Technologies in Art", it should be noted that the main component of the content of training in it is not so much knowledge as skills and abilities. One of the ways to solve this problem is the introduction of modern computer technologies in the educational process, since their use in education increases the effectiveness of training and the quality of emerging knowledge, skills and abilities.

Let us consider the features of testing with the help of modern computer technologies, in particular, using the Airen testing program.

Airen is a free program that allows you to create tests to test knowledge and conduct tests both on a local network and via the Internet or on single computers. The name comes from the abbreviation IREN (Interactive Remote Education Network), which originally referred to a platform conceived as the basis for the development of a wide range of educational network programs. Subsequently, the testing system built on this platform also became known as [4].

Tests created by the teacher can include tasks of various types: with the choice of one or more correct answers, with entering the answer from the keyboard, for establishing correspondence, for ordering, for classification.

Let us dwell in more detail on the types of test tasks. Types of test items - tasks with a choice of one or more answers, tasks with an answer input, tasks for correspondence, ordering and classification - allow you to choose such a wording of the test question that is most adequate to the teacher's goal and the meaning of the question. So, a question with a choice of one correct answer allows you to accurately separate the desired situation from all the others, and a question with a choice of several correct answers shows the variability of the problem. Very convenient in some situations questions on the classification. With their help, one question can stimulate the solution of several tasks of the same type at once, a comparative analysis of which leads to a new level of knowledge of the subject. Using matching questions, you can stimulate students to study the theoretical aspects of computer science and control this process.

In general, the system is a fairly powerful tool in preparing tests for various purposes and in conducting tests. The system is easy to install and run. It is possible to add test results to the log and print it. A random sequence of questions within a test module is possible. It is possible to complete the test with any number of questions passed with grading based on the actual number of answers, it is possible to limit the time for passing the test. The information of test modules and logs is protected from unauthorized access.

What are the advantages of testing using this program? The learning process using Airen allows you to implement the basic methodological principles.

1. The development of students' motivation to study the discipline: students are more interested in doing a test on a computer than a test on paper.
2. Availability: the student can take the test anywhere: in the classroom, in the computer lab, at home or in the hostel.
3. Individualization of the educational process: each student completes the test at a pace familiar to him. There is an opportunity to pause, to think, to return to any question and correct the answer given to them.

With online testing, the teacher sees on his computer detailed information about the progress of each student. At the end of the work, these data are stored in the archive, where they can later be viewed and analyzed using the tools built into the program.

Testing with the help of computer technologies improves the process of checking and evaluating students' knowledge. The teacher ceases to be a source of negative emotions for students associated with the assessment of the level of formation of various skills, since the assessment of the student's work is carried out by a computer, which eliminates the factor of subjectivity in grading.

The curricula provide hours for independent work of students during the passage of each discipline, and this program can be used in the process of independent work of students, because. it provides for the creation of tests in the form of stand-alone executable files that can be distributed to students for testing without using the network and without saving the results. This mode is focused primarily on tests designed for self-testing. To start testing, a student just needs to run the received file on any computer with Windows, installation of any programs is not required for this.

Another positive feature of testing using the Airen program is its mass character, ease of creation and use. Test items are created once and can be used multiple times. If necessary, the teacher can easily make changes to the wording of assignments, add or remove individual assignments. At the same time, there is a saving in training costs, since there is no need to create printed materials each time to test students' knowledge. Thus, computer testing acts as a tool for managing the educational process: it makes it possible to analyze and exercise full control over the learning process.

As it turned out, the Airen system can also be successfully used to organize training activities in many disciplines, since it fully meets the requirements for computer testing systems. As educators, the authors look forward to further improvements to this program of products to expand their learning capabilities.

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