

INFORMATION TECHNOLOGIES IN EDUCATIONAL MEASUREMENTS

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Annotation. The author characterizes the implementation of information technologies in the sphere of educational measurements. The advantages and weak points of computer testing in comparison with blank testing are analyzed.

Key words: information technologies, computer testing, blank testing, educational measurement, evaluation/assessment.

The implementation of module-rating system in the learning process which has fixed the focus on students' independent work, requires the use of new control methods for assessing the knowledge, providing high adaptability of the control and the objectivity of its results. In the condition of open information-educational environment test technologies are becoming an integral component of the educational systems. It is a demand of our time to create new technologies that should assure the effectiveness of testing and test results' processing.

The XXI century has already become the epoch of increasing implementation of new information technologies in all spheres of human activity. In fact, IT has become the integral part of educational systems. The new technologies cause a big interest in processes of teaching and studying, and this is one of the reasons of their spreading in the sphere of educational measurement, in evaluation and testing especially.

Nowadays when computer testing has gain huge popularity all around the world, mostly in the USA, the advantages of this method became more obvious. Among the main strong points of computer-based testing we can mention:

✓ *Improving security.* Security and preventing unauthorized access is a serious obstacle. Computer systems can largely solve this problem. Using the newest tools the test-developers can create larger volumes of test-items, store them electronically in distributed networks of servers. Thus, access to these tasks is becoming very limited.

✓ *Efficiency.* Computer testing significantly accelerates the processing of data, reduces the time between the procedures of testing and evaluation that can more efficiently provide the final result and take corrective measures.

✓ *An extension of the test's tasks.* Computer tests can move beyond the traditional text material. They make it possible to use audio, video files, images,

hyperlinks, and so on. They are the tools for dynamic formulation of problems and for better measurement of knowledge, skills and abilities of the tested.

✓ *Consistent and reliable assessment.* Due to computer testing the information capabilities of the evaluation process are increased: you can get additional information about the dynamics of testing of each student (how many times the student has moved back to the previous questions, how many times he has changed the decision and has chosen another variant, how long he has thought over each question, etc.) and allows set time limits for the testing process.

✓ *Ecological compatibility.* The computer testing doesn't require money that is spent on printing and transportation of blank tests. On the contrary they limit the use of forestry raw materials and the exhaust emissions.

Despite the undoubted advantages of new technologies of computer testing we cannot but mention that they are been developing still. This is a reason why we can sometimes meet problems of their implementation caused by some weak points, including the following:

➤ *Additional expenses.* Transfer of national educational assessment programs for a computer platform is costly. It includes development of infrastructure of networks of the equipped evaluation centers, development and acquisition of computer tools for tests creating, development of special software for presentation and evaluation of tests, storage of large amounts of information (bank of tests, files of tested results, etc.). Today, widespread adoption of Internet has somewhat reduced the cost distribution of test programs. But still we must take into account such costs.

➤ *Equal opportunity and equity.* Often it is difficult to compare test results between different schools due to various platforms of their functioning. Some equipment and tools can differ significantly: monitor size, screen resolution, keyboard, processor speed, etc. These factors may cause that one task will look on different computers in different ways, or will need more time to bring them to the screen. Surely, these reasons may have a negative impact on the final result.

➤ *Computer literacy.* One student may be fluent in computer technology and feel confident when tested. Other students may feel less confident due to less experience with computers. The difference in computer experience and knowledge can significantly affect the results.

➤ *Reduction in safety.* While on the one hand, computer testing is much better to prevent unauthorized access, compared to the blank test, still a number of serious threats remain: variants of tests can be mistakenly stored in another directory, the tasks of the test can be stolen, the server may be subject of hacker interference, etc. These problems can be small or very significant. Therefore, customer institutions should take the necessary measures to ensure the highest security level of the network of tests.

➤ *Reliability of the system.* Computer technology, to a pity, can break.

Network may not work, computers may break down, the programs may be damaged by some viruses and so on. These problems are also significant, but constant competent technical supervision will help to prevent them.

To avoid potential problems and to increase the efficiency of computer testing it is required the concerted cooperation, joint efforts of all stakeholders and leading experts in different professional areas: politicians, educators, pedagogues, psychologists, students, experts in educational measurements, programmers, computer architects to create high-quality safe products capable of diversify, improve and optimize the learning and evaluation processes.

Thus, new educational technologies, including computer testing, are widely implemented in modern society. These technologies can improve the quality of testing process and educational system in general. That is the reason of necessity of creating and implementing of the reliable test complexes.

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ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ В ОБРАЗОВАТЕЛЬНЫХ ИЗМЕРЕНИЯХ

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Аннотация. Автор характеризует процесс внедрения информационных технологий в сферу образовательных измерений. Анализируются преимущества и недостатки компьютерного тестирования в сравнении с бланковым.

Ключевые слова: информационные технологии, компьютерное тестирование, бланковое тестирование, образовательные измерения, оценивание.