

**ONLINE TESTING: KNOWLEDGE CONTROL DURING DISTANCE  
LEARNING OF THE ENGLISH LANGUAGE AT A NON-LINGUISTIC  
UNIVERSITY IN CONDITIONS OF FULL-SCALE ARMED AGGRESSION**

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**Abstract.** *The article deals with some issues of online testing technology in conditions of full-scale armed aggression, which is increasingly being used in pedagogical practice when teaching such an interdisciplinary subject as a foreign language at a non-linguistic university. The advantages and disadvantages of this method of teaching and controlling students' knowledge are revealed. An analysis is presented and the vulnerabilities of modern online testing systems are investigated.*

**Keywords:** *online testing, distance learning, knowledge control, forms of control, evaluation, functions of knowledge control, e-learning.*

The large-scale invasion of Russia, which began on February 24, 2022, exposed a complex of serious problems in Ukrainian education. One of these issues is the issue of assessment during distance learning in times of a full-scale armed aggression by the Russian Federation.

The next day after the beginning of the full-scale invasion of Russian troops into Ukraine on February, 24 the Ministry of Education and Science of Ukraine recommended pausing the education process in education institutions at all levels and starting a two-week vacation for all students and education workers.

Since March 14, the education process has begun to resume in the regions where the security situation allowed it. The decisions as to where and how classes should be held were made by regional administrations and education institutions. It was noted that the students who have left their homes can resume their studies in their temporary locations of residence, both in Ukraine and abroad.

Education institutions continue working remotely according to Ukrainian standards and curricula: children study, and teachers work from home or from their temporary places of residence. So, valuation of educational achievements has always been and remains an important and difficult issue, especially when it comes to evaluation during wartime. [1]

Under these conditions, it is necessary to remember that each participant in the educational process is, first of all, a person who is characterized by anxiety, worry, fear, despair, fatigue, etc. It takes a lot of willpower to gather your thoughts and force yourself to join the class, focus on the learning material, and express yourself on various communicative topics.

Under these circumstances, teachers of foreign languages in Ukraine should differentiate the goals of assessing students' foreign language communication skills and change their attitude towards assessment in general.

There are many forms of control over the level of forced language and speech skills – oral survey, frontal survey, work in pairs, final control, phonetic dictation, etc. Recently, two types of control have been mainly used: oral questioning and written work. [2]

Oral questioning does not always provide a complete picture of learned or unlearned material and takes a lot of time; written work requires a lot of time to check it. Both of these methods may not lead to an objective assessment of the knowledge acquired by students.

Such a control method as online testing can be successfully used for current, intermediate and final testing of knowledge. With the help of tests, you can check the knowledge of students both selectively and in general. Testing is important for consolidating, improving the acquired knowledge, skills, and identifying gaps in knowledge. The tests are suitable for students of all ages. They can be used at all levels of education, taking into account the psycho-physical characteristics of students.

The online testing system, as one of the forms of independent work, contributes to the formation of stable and conscious knowledge, enables each student to work at an accessible pace, and contributes to a full-fledged, high-quality control of the level of knowledge. The use of tests in English lessons allows for the individualization and differentiation of learning, timely corrective work in the teaching process, and reliable assessment of the quality of learning and its management.

In e-learning, as in face-to-face format, it is important to keep the level of knowledge of students under control. To do this, we use various methods of verification. The most popular of them is remote testing.

Knowledge control in online learning is a test and assessment of students' knowledge. [3] Most modern online courses consist of theoretical lessons and testing exercises. Exercises are necessary both for the organizers of the training and for the students themselves.

Main functions of knowledge control:

**Developing.** By completing tasks, a person learns important information better and improves his knowledge, applying them in new situations.

**Educational.** Regular review disciplines and promotes a sense of responsibility.

**Controlling.** The training organizer receives information about the level of mastery of certain knowledge.

**Diagnostic.** The organizer will find out which topics are most difficult for students, what mistakes they often make. Based on this information, materials can be optimized and more effective teaching technologies can be selected.

There are various methods for conducting knowledge control. [4] For example, you can conduct a conversation, survey or questionnaire. But the most objective verification method that allows you to evaluate the results in quantitative terms is testing.

For some people, remote testing is associated with entertainment content, psychological questionnaires, or tasks to test the level of intelligence. In fact, this tool is actively used in various areas of online education.

**Testing in online learning** is the process of assessing knowledge in the format of a question with ready-made answers. [5] For example, for grading, it is not necessary to distribute assignments on slips of paper and check them manually. Modern online testing allows you to automate this process. Control of the level of knowledge with the help of remote technologies is carried out remotely in pre-compiled programs. And complex checks and calculations of results are done automatically.

Monitoring the results of students' learning activities in order to determine the degree of achievement of learning goals and the level of language and speech competence seems to be an important stage in the process of teaching foreign languages. Thus, the development of an objective control system is one of the important directions in the methodology of teaching foreign languages. An essential role in the organization of control is given to testing, in particular, electronic testing.

A computer test is a test, all stages of which are controlled by a computer. The test on forms with subsequent electronic processing is not computerized.

Electronic testing has its own characteristics: validity, reliability, representativeness, discrimination. [6] Test validity is the parameters that reflect the ability of the test to obtain results in accordance with the task. The reliability of the test refers to such features as accuracy, compliance of the results during the initial and re-run of the test by the same test-takers. Representativeness indicates

compliance with testing standards, i.e. there should be as many tasks in the test as they are required to summarize the learning of the material by students on a particular topic.

Discriminativity is related to the amount of differentiability of test results. If almost all students (strong and weak) perform the test with the same results, this means that the test is not discriminatory.

The features of computer testing also include the probability of randomization and adaptability, time management, the presence of interactivity and multimedia. Randomization, i.e. the arrangement of tasks in a random order makes it possible to individualize the options during synchronous test execution. Adaptability is ensured by the flexibility of the computer testing system. If the student copes with the task, he moves on to a more difficult task. If a mistake is made, it is necessary to return to easier tasks or to refer to a supporting theory or rule.

Time management refers to the technical ability to impose a time limit on the entire test or individual task. An important feature of electronic tests is the presence of feedback, which is provided by the interactivity of the test and allows you to automatically calculate the correct answers, set marks, and familiarize the student with the test result.

Usually testing is carried out in three cases:

**Before training** it helps to assess the level of current knowledge. The purpose of such testing is to determine the basic knowledge of people in the topic of future training, so as not to waste time on material that is already familiar to everyone. In addition, through pre-testing, you can make sure that an applicant for a position in your company has the necessary skills to get started. Or choose the right group for studying in an online school according to the level of language proficiency.

**In the process of learning**, it helps to assimilate key data.

The goal is to consolidate the completed stage of learning, to highlight key points from the studied material. An intermediate test can prompt the necessary information in time if a person misunderstood the material covered.

**After training** it helps to determine what the test-taker has learned.

The goal is to check what information was remembered and fixed in long-term memory after training. Such testing helps to see if a person has mastered the necessary amount of knowledge in order to continue working or studying.

When developing computer tests, certain rules must be observed. The electronic test includes the most significant questions on the topic, which should be clear, understandable, unambiguously interpreted and have a sufficient number of answer options (4-10). It is not advisable to develop a too voluminous test.

There should be no hints in the wording of tasks. Provocative questions, minor features and details also do not meet the requirements for an electronic test. Interrelated tasks ensure the integrity of the test. When compiling a test, it is necessary to follow the principle from simple to complex.

To develop computer tests in English at the Department of Foreign languages of Vinnytsia National Technical University, we use the Moodle, Google Classroom, Edmodo as well as Jet IQ resources, which provide a number of programs and constructors for compiling computer tests. [7] These include templates for writing tests in PowerPoint, HotPotatoes, etc. In addition, sites that allow you to take online tests on various aspects of the language can be used both for independent work of students and for work in the classroom. We use the following types of electronic tests: introductory, current (thematic), training and final.

Since the Entry Test precedes the study of a topic, it contains links to theory and information about the topic. Testing time is not limited. In case of a negative result, the test can be repeated (preferably with a positive result).

Diagnostic / Progress Test is carried out following the completion of the topic. The purpose of the current control is to check the degree and quality of assimilation of the studied material. Testing time is usually limited. The test may be retaken at the instructor's discretion. The test also includes teacher's recommendations for clarifying the most difficult questions.

Achievement Tests are "final tests" and are held at the end of the semester or academic year. The test must have high reliability and validity, since the evaluation of the final control is carried out on the basis of the criteria provided for by the

curriculum and educational standards. Testing time is limited. The test is taken once and the score for the test is part of the rating score.

We believe that learning tests play an important role in the development of language and speech skills. In the training test, repetition of the same task in different versions and at different speeds can be used. Learning tests can be run either synchronously in the classroom or asynchronously as part of self-study.

Tests can be closed or open. Cloze Tests are divided into:

**Traditional Cloze:** every 7/8 word is deleted in the test;

**Modified Cloze:** part of a grammatical or lexical item is removed;

**Multiple Choice:** choose one or more answers from the given options;

**Authentic:** letters or words at the beginning or end of a line are removed;

**Match:** students have to match between a word and a translation, question and answer, text and picture, etc.;

**Consistency Test:** in this type of test students are supposed to place letters, words, sentences, parts of text in the correct sequence;

**Short Answer:** answers such as "Yes", "No" or "True", "False".

When developing a computer test, we give preference to tasks of a closed type. Of the open type tasks, you can use the following: complete the text with a word, a small phrase or part of a grammatical structure.

Here are some examples of the use of electronic tests for first-year students of the Faculty of Power Engineering. At the first lesson, we conduct an introductory test, which is designed to determine the general level of English language proficiency of first-year students, followed by distribution into groups according to their level and further education in these groups. The current / diagnostic test is carried out in order to determine the degree of assimilation by students of the topic being studied.

Students perform tests on professional topics *Types of Current, Power Plants, Power Transmission* on the platform of the e-University Jet IQ resources of VNTU (Vinnytsia National Technical University).

The final test is held at the end of the semester and academic year in the e-University system – JetIQ. Tests include both grammatical and lexical tasks, and tasks on the topics covered.

Thus, the range of controlled skills and abilities can be significantly expanded using innovative technologies. [8] At the same time, the quality and objectivity of the test results increase: the testing system allows the teacher not only to make a control cut of the level of students' knowledge, but also to analyze the difficulties that arise in the process of mastering the material, as well as save time on grading.

However, we believe that electronic testing should not completely replace traditional forms of control. To obtain a stable result of knowledge assessment in the process of teaching a foreign language, a reasonable combination of traditional and computer control is necessary. [9] Computer tests on a specific topic (introductory, current, training), as well as final at the end of the semester and academic year, can serve as an excellent addition to such traditional forms of control as oral questioning in practical classes, written control translation, essay, abstract, colloquium and oral exam.

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