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***THE APPLICATION OF ICT IN THE ASSESSMENT OF EDUCATIONAL ACHIEVEMENTS IN ENGLISH OF HIGHER EDUCATION STUDENTS***

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*The article analyzes the place and role of pedagogical assessment in the organization of the educational process in higher education institutions. It highlights that the objective results of assessment are an important component in the formation of a competence approach to the professional training of modern specialists. Generalized theoretical developments of domestic and foreign scientists on the given problem are considered, the analysis of which proves that pedagogical assessment has always ranked high in providing educational services. It is noted that although placement, diagnostic, progress, achievement, and proficiency tests have been the main forms of assessment in higher education institutions for quite some time, with the beginning of digitalization of educational system, objective conditions have led to implementation of pedagogical assessment using information and communication technologies. A global pandemic as well as the war in Ukraine urge the expansion of possibilities and improvement of the quality of pedagogical assessment of students' learning outcomes using distance learning technologies. Therefore, the state and potential of educational assessment are analyzed; results of measuring learning outcomes using distance learning technologies in higher education institutions are investigated. It was found that there are adequate conditions for distance learning of students via various Language Management Systems LMS (Moodle, Brightspace, Docebo, Edmodo, Schoology) in Ukrainian institutions of higher education. At the same time, the survey taken by the educational process stakeholders confirmed the hypothesis that faculty and students are not quite ready to accept pedagogical assessment carried out through the medium of distance learning technologies which considerably complicates objective assessment and evaluation of learning outcomes in the absence of face-to-face communication. In order to meet the present day requirements, a set of measures is proposed regarding the preparation and conduct of pedagogical assessment of students' learning outcomes using digital technologies.*

**Keywords:** *pedagogical assessment, learning outcomes, distance learning technologies, information and communication technologies*

**Introduction**

Pedagogical assessment of the learning outcomes in tertiary education has a long history. However, first the global pandemic and then the war in Ukraine made adjustments to the educational process and exposed new challenges for educational institutions. Due to limited opportunities in the organization of the educational activities, higher education institutions introduced training through Zoom video conference services, BigBlueButton (Open Source Web Conferencing), Google Meet, employing various LMS. As a result vast majority of teachers gained certain experience in conducting lectures and practical classes with students. However, in these conditions, pedagogical assessment of the of higher education students with the help of distance learning technologies still remains quite challenging. Actors and stakeholders of educational process are still searching for the best option to assess learning outcomes.

During the second half of the 20<sup>th</sup> century and the beginning of the 21<sup>st</sup> century various educational philosophies and approaches to the assessment of learning outcomes appeared in the



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education system. These systems have stood the test of time, but they continue to evolve as both learners and our understanding of their needs change. Both teachers and researchers of higher education institutions have formed certain stereotypes for pedagogical assessment of students, which are based on reliable, efficient and effective methods. Assessment predominantly occurs at the end of the study of specific topics or the entire course. Each teacher, based on his or her own experience, knows what kind of progress, achievement, and proficiency testing he or she wants to use. As a rule, knowledge, skills and abilities are assessed in the form of a test or exam (oral or written). On the one hand, this is a good way to assess students' competence; on the other hand, it is necessary to search for and develop brand new assessment methods. One can't but agree with the opinion of O. Shcherbak who states that "...the need to evaluate the assessment methods themselves is becoming more complex and poses many challenges for the teacher. As the need for certain skills and knowledge required at the workplace grows, so does the need for their appropriate assessment" [8]. These thoughts become especially relevant in contingencies, for example, during a pandemic or war. The goal of assessment here becomes especially significant – to measure and generalize how students have mastered the knowledge and skills required by the employer and defined by the educational program.

### **Analysis of recent research and publications**

Modern scientists and educators clearly favor the opinion that the existing system of pedagogical assessment dating 20<sup>th</sup> century is outdated and requires improvement not only of the traditional ones, but introducing brand new, innovative approaches, in particular with the use of information and communication technologies. In recent years, the issue of assessing educational achievements of graduates of higher and professional (vocational and technical) educational institutions has become relevant. According O. Shcherbak, "...modern society requires professional education to prepare young people, able to meet the challenges of time, competent and mobile in the modern work market, with a civic position, focused on self-development and lifelong learning" [8, p. 4]. Issues of pedagogical assessment of future border guards were investigated by O. Zabolotna. She focuses on formation of "the main functions of assessing cadets in forming their readiness future professional activity, namely: evaluation, diagnostic-corrective, stimulating-motivational, educational, prognostic..." [1, p. 75].

Researchers Ya. Kulbashna and O. Astapenko note that "assessment guides learning, and effective modernization of curricula and programs is possible only against the background of corresponding changes in the content, and sometimes also forms of assessment" [5, p. 173]. They rightly draw attention to the issues of diagnostic activities in medical educational institutions, in particular stating that "the content of test tasks on the first years of study should assess the level of knowledge within one discipline, later on – taking into account the knowledge and practical base of several related disciplines, at the pre-graduation stage – to enable the student, when performing tests to demonstrate the integration of knowledge in the context of the specialty. This will contribute to the formation of the competence of critical, and in medical education, quite an obligatory aspect - clinical thinking" [5, p. 177]. Considering the problem of pedagogical diagnostics, T. Kanivets notes that "assessment reproduces the score, that is, a digital or other symbolic form of expression and fixation of the evaluation of success, – a brief description of learning outcomes, their positive points and shortcomings, emotional attitude" [3, p. 38]. In the recent scientific works of scientists, namely O. Bench, E. Dolinská, M. Dudek, V. Hladush, A. Hloba, V. Klein, D. Kolibová, V. Kušnírová, A. Meerson, I. Rochovská, V. Šilonova [10, 13, 14] highlight a number of challenges, contradictions and critical points regarding tests and diagnostic methods aimed at ensuring the quality of assessment in an inclusive educational environment. O. Kolhatin experimentally tested the effectiveness of using a designed computer-oriented system of pedagogical diagnostics during the professional training of future teachers of science and mathematics [4]. The researcher notes that university education has taken steps forward in recent years, in particular, "...actively discussing the technology of building a system, means of analyzing the quality of tasks, the procedure for renewing the task bank,...based on the analysis of the classifications of systems of automated pedagogical diagnostics and computer

testing, the requirements for pedagogical diagnostic software are determined in accordance with the didactic purpose of its application" [4]. However, the researcher also notes that "... the insight into information and communication technologies in the education of the late 20th and early 21st centuries from the point of view of the theory of pedagogy, didactics, theory and methodology of professional education is insufficiently covered" [4]. Also of great value are the scientific achievements of S. Sysoeva and K. Osadcha, who consider the issue of forming the ICT competence of a tutor during the pre-school training, stating that "...to ensure the sustainable development of society in the future, it is necessary to increase the ICT competence of future teachers, who must effectively to apply ICT in their professional activities, making teaching more successful and exciting" [6]. The problem of professional growth of teachers in the conditions of digital education was studied by L. Lau. He stresses the value in "... the use of Internet communication channels both for obtaining information and for the effectiveness of the educational process..." [11].

### **Problem statement**

The analysis of pedagogical assessment convincingly shows that the forms of assessment can be different and all of them have the right to exist, regardless of the history of their initiation. In this regard, L. Friedlander and V. Anderson clearly stated "...pedagogical assessment (PA) is not an exact science and requires a constant search for progressive forms and a multifaceted approach..." [9, p. 353]. T. Kanivets adds that "...it is especially relevant in the conditions of modern society, in which information quickly multiplies, becomes obsolete and acquires qualitatively new outlines, and a person needs the formation on new competencies to adapt to it" [3, p. 67]. The above confirms the idea of innovative software development being an important organizational condition for the formation of professional competence of the future teacher. To investigate this problem, a survey was conducted (through viber groups, e-mail, mobile messengers, questions in chat rooms during real-time conferences) among the educational process stakeholders: teachers and students of bachelor's programs of distance learning specialty (automotive transport) of the National Army Academy. The respondents were asked about their psychological and pedagogical readiness to use distance learning technologies in the pedagogical assessment of learning outcomes; knowledge of educational digital content; technical availability; motivation to use ICT in learning and teaching; the level of self-assessment of one's own knowledge, skills, and acquired professional competences; effectiveness and fairness of the assessment used at the current stage; realizing the need for additional training; the ability to determine students' abilities and rating. During the research, it was found that the educational environment of higher education institution has gained certain achievements in the introduction and the use of e-technologies, but there still remains a requirement for their development in the pedagogical assessment of learning outcomes. However, the attitudes of the educational process stakeholders to the use of remote technologies in pedagogical assessment differ significantly. Faculty turned out to be more restrained and cautious, students – on the contrary, expect innovative approaches, have a positive attitude to the use of assessment methods done through e-technologies. The purpose of the study was to systematize theoretical and practical achievements in the sphere of pedagogical assessment of students in higher education institutions, as well as to improve the ways to perform remote assessment of learning outcomes, to justify the conditions of using digital technologies for the fair assessment of learning results and the quality of educational services. It also aimed to consider strengths and shortcomings of assessment using electronic means and present fragments of educational resources in higher education institution. In order to achieve the aim, the general concept of empirical study on the problems of assessing the students' learning outcomes was formulated and substantiated; the list of components and factors that affect the level of the distance form of assessment was defined. A study and analysis of the experience of using LMS in the conduct of assessment by teachers and students of NAA has been carried out, a survey and questionnaire pertaining the organization of educational process was conducted, the results were summarized and proposals to improve this process were put forward. An analysis of theoretical achievements of scientists from

Ukraine and other countries regarding the state of development of the problem of evaluating higher education students emphasizes the fact that the issue of using a distant assessment of students requires additional study and rational application in the conditions of quarantine restrictions and wartime, thoroughly selecting the forms of application of digital technologies in assessment of students' knowledge.

### **Research methodology**

During the research, the methods of theoretical analysis of scientific sources and the capabilities of electronic services to carry out assessment and verification functions and the abilities of students to report on the mastery of software knowledge and skills were used. A description of the use of Internet resources for the implementation of testing functions to assess the level of language training is given. The research as well employs a number of methods of empirical study pertaining educational process assessment: surveys, questionnaires, and mathematical and statistical methods of processing research results.

### **Research results and Discussion**

Pedagogical assessment of students is one of the most important components of the educational process of a higher education institution. In the ECTS system, a didactic principle that underlies the quality of higher education student' pedagogical assessment is based on the following competence approach: descriptors of the National Qualifications Framework → competence and program learning programs → learning outcomes by educational programs (curricula)→ learning outcomes by study programs → generalized means of diagnosis → specified means of diagnosis → assessment criteria.

Considering the integration processes of the last decades in higher education, in particular the member states of the Bologna Agreement, the results of student assessment are mostly fixed in scores (numbers or letters), and they reflect the level of knowledge or skills acquired by the student and which relate to the desired professional knowledge and skills: A (90-100 points) – excellent, high level; B (82-89 points) – very good, average level; C (74-81 points) – good, D (64-73 points) – satisfactory, sufficient level; E (60-50 points) – conditionally satisfactory, limited sufficient level; FX (35-49 points) – unsatisfactory with the possibility of re-compilation; F (0-34) – unsatisfactory with mandatory repeated study of the discipline. Knowledge measurement systems may differ slightly in different institutions of higher education, but at the same time they are clear to those familiar with the assessment results. It was in the 2020 academic year that higher education institutions around the world faced the problem of how to effectively carry out assessment and to evaluate the results of student learning during the emergency situation that arose due to the spread of the pandemic and the introduction of quarantine measures. For this purpose, the practical experience of using remote forms of assessment in universities was studied. In the institutions of higher education of Ukraine, in the early 2000s, the introduction of a corporate electronic system for managing the educational process began centrally, that is, with the participation of the Ministry of Education. In NAA, this system started working in 2021. The system is designed for all actors of the educational process. It is constantly being improved in accordance with the requirements; the digital content of services for administrators, teachers and students is expanding. Currently, the following services are provided: use of Office 365 services (separately for students and faculty), educational platform Moodle: the system contains complete information on educational disciplines, educational programs, reporting procedures, lists of students, their email addresses, and the results of student success throughout the entire period of learning; informational social services for all categories of university personnel. Access to the information base of the system is limited to registered users. The rest of the information services, in particular the electronic library or international activities, scientific achievements, etc., are publicly available on the university website. Teachers find it convenient to use the platform, because they are provided information in advance about the terms of semester assessment, and students choose time convenient for them within the limits of the teacher's capabilities. The electronic system of the

university resembles a service center for servicing actors of the educational process of the university. The teacher, using the system, can appoint advising hours; assign a task to the student, which is automatically transferred to the required addressee. At the same time, the number of educational, social, and legal services is constantly increasing, which ensures a good image and high quality education for a modern educational institution. Everything is recorded within the system, and the final information is automatically sent to the stakeholders by e-mail. Communication between the teacher and the student takes place online; the assessment is entered in the electronic report. In the event of an unsatisfactory score, two retake attempts are possible, but the electronic system grants permission in accordance with the terms provided for in the Regulations on the Organization of the Educational Process. As for the organization of the final certification of graduates, it remained unchanged during the pandemic. In the preparatory period, i.e. during the introductory methodical seminars, the setting of tasks, integrity checks, consultations on the design, review of qualification papers and other organizational activities were carried out online through the academic electronic system AiS2. Completion of state exams and defense of qualification papers is conducted offline in compliance with sanitary requirements. In 2019, the NAA started implementing a system of distance learning and development of educational content Moodle, found at <http://adl.mil.gov.ua>. Particular LMS Moodle has all the necessary functionality: forums, chats, polls, glossary, event schedule, course regulations, user management, progress log, reports, the ability to organize video meetings using BigBlueButton, the formation of educational content and the organization of pedagogical assessment through tests or projects. The testing process in the Moodle system can be organized as an element of assessment and as an element of training. The Test system module allows us to create sets of test tasks (questions). All questions are entered and stored in the data bank and can be used repeatedly when studying the same discipline – the formation of different tests can be based on the same questions. The system has the ability to set a certain number of questions in the tests in a certain or random sequence with a given difficulty, type or topic. The teacher determines the value of the test questions from 1 to 10, after which the system automatically determines the grade, which can be recorded in the success log. A separate component of the Moodle system for pedagogical assessment is a project, the instructions for which are defined and placed by the teacher himself. Various types of tasks can be performed in the project. With the help of feedback settings, the teacher has the opportunity to comment on the results of the test or the project completed by the student. Despite the fact that in the 2019 academic year, training was organized for all teachers on the peculiarities of working in the Moodle system, preparation and placement of their own training courses on it, this type of work did not gain popularity and only some teachers of the university decided to implement this powerful tool.

The COVID-19 pandemic has become a powerful catalyst for the use of distance learning technologies in the pedagogical assessment of applicants for higher education in Ukraine in general and NAA in particular. On the basis of the recommendation letter of the Ministry of Education and Science of Ukraine No. 1/9-249 dated May 14, 2020, the NAA developed Regulations on the organization of semester assessment and attestation of higher education applicants using distance learning technologies at the National Army Academy. In accordance with this Regulation, assessment of the educational process using distance learning technologies must meet the following requirements, such as: the presence of authorized access to the information and communication tools of the distance learning organization; the ability to determine the start and end time of access, the duration of tasks; the objectivity of the criteria for checking performance results with the active use of automated knowledge assessment tools; the variability of the formation of tasks of assessment using algorithms of random selection of questions. This Regulation also defines the variability of the communication types among participants of the educational process. As well, according to the personal preference of the teacher, remote communication can be carried out through means of communication built into the learning management system (LMS), electronic e-mail, messengers (Viber, Telegram, etc.), video conferences (MS Teams, ZOOM, Google Meet, Skype, etc.), forums, chats, etc. In the context of our research, the results of an anonymous survey of 6,024 scientific and pedagogical workers and 22,367

graduates of higher education institutions of all types and forms of ownership regarding the identification of technologies (tools) that are used in assessment during the educational process (learning and teaching) in the conditions of nationwide quarantine conducted by the State Education Quality Service of Ukraine from April 23 to May 5, 2020 [2].

The answers received clearly show that among the variety of such technologies, sending of tasks to be completed by students to e-mail remains the most used form of assessment, which may be due to an individual approach to ensuring that students effectively achieve program learning results in accordance with the content of a certain educational program. However, the format of individual surveys through video communication is the most expensive in terms of using time for preparing and checking tasks and can significantly reduce the systematicity (regularity) of conducting quality assessment of the acquired knowledge. The results of the survey on the goals and implementation of distance learning technologies by higher education institutions showed that only 45% of respondents consider distance learning technologies and information technologies in general as an integral or priority component of development. This indicates the unpreparedness of both individual institutions and the higher education system as a whole to perceive changes, the lack of tools for adaptation to the modern pace of development of education and science. Almost half of higher education institutions of Ukraine work and teach students using old style methods: textbook, blackboard, and teacher. Under such conditions, the question of providing really high-quality educational services becomes rhetorical. At the beginning of the 2020/21 academic year, teachers were delivered training on working on the free Google Classroom platform, which combines useful Google services organized specifically for education. This step was done due to the fact that, firstly, Google Classroom is available to all owners of a personal Google account in the web interface and on mobile devices, and, secondly, educational institutions can receive approval for registration in G Suite for Education with free and unlimited access to all advanced Google services. Among the advantages for a teacher working on the Google Classroom platform are: conducting video meetings without 40-minute interruptions; creation of courses, assignments and their management, working with grades online; adding materials to tasks, such as YouTube videos, Google forms, surveys, and other objects from Drive; providing comments and feedback directly to students in real time; publishing announcements and questions for students in the course feed; the opportunity to offer the elder or the curator to sign up for alerts on assignments that are due for submission and about unfulfilled tasks. So, to sum up, at the National Army Academy, the educational process and ongoing assessment using remote technologies is carried out using various types of tasks, such as: different-level individual and group tasks (report, presentation, project, video recording, etc.) with feedback on the results of the assessing of students educational achievements; assessment by the teacher of interaction and communication between students in asynchronous and synchronous modes through chats, forums, surveys, questionnaires, etc.; peer assessment; assessment by the teacher of the results of individual and group assignments by the students using glossaries, databases of educational disciplines; tasks that require a detailed, creative response (for example, case studies); tasks, the form of which is adapted to be performed by means of LMS; and other tools. Designing educational processes using presented approaches to introduce and practise educational content with Moodle significantly increases the learning effectiveness, simplifies the perception of educational material, enhances motivation to learn a foreign language and has a positive effect on its effectiveness. [7].

Therefore, having analyzed the state of educational environments and the place of distance learning technologies in it, we can conclude that military state-owned institution of higher education was able to create modern educational environment that with the successful use of digital technologies. Throughout the 2020/21 academic year, the teachers gained some experience in conducting lectures and seminars remotely. The stakeholders note that because of limited functionality of the educational environment caused by the pandemic also played a positive role in the organization of education. By the 2020 academic year, not all teachers and students had a perfect understanding of forms of remote communication. However, the issue of pedagogical assessment of learning outcomes remains on the

sidelines facing serious challenges, the first one oral survey, which in verbal communication remains the most widespread method of pedagogical assessment of the level of knowledge, in online mode it does not prove objectively efficient. The student does not have time for preparation, for which 20-30 minutes were previously allocated, because there is no control or supervision over the use of information sources. Such conditions are too difficult for some students, because the exam is usually stressful, that is, it has an additional mental load, especially for those applicants who are trying to get a stipend. The second – written form of the exam has completely lost its meaning, since the student has the opportunity to cheat, that is, to violate integrity. The third – in the case of insufficient readiness to give the correct answer, the student can simulate his actions by turning off the computer or the sound under the pretext of low-quality Internet connection. Today, the issue of implementing automated pedagogical assessment using educational tests that can be done through distance learning systems such as Moodle, Google Classroom, Moodle, etc., has been brought up to date. At the same time, "...the examination tasks may include a set of practical situations (stereotypical, diagnostic and heuristic tasks) randomly generated by the LMS or other resource, which involve solving typical professional tasks of a specialist at the workplace and allow diagnosing the level of theoretical and practical training of the student and the level of his/her competence in the academic discipline; test questions with the activated option of automatic selection of random test questions from the test database for each student, as well as shuffling of the proposed answer options (such options are available in most LMS, specialized online testing services); creative tasks and experimental situations, the solution of which requires the student to have comprehensive knowledge of the discipline, which can demonstrate the level of the obtained learning results.

Nowadays the issue of using independent, in particular with the help of digital technologies, testing is being actively discussed for graduates, whose level of competence depends on the success of the development of society as a whole, for example, economists, legal scholars, and teachers.

Digital testing technologies become a modern tool for pedagogical assessment. Nevertheless, test design needs to meet some criteria, namely:

1. The content of the test is subject to clear planning. At the stage of developing the test, the content that needs to be assessed is selected, the form of the tasks, their number and location are planned. The content plan of the test is analyzed by experts.

2. Task form. In the tests, the form of tasks is standardized – in the form of presentation and in the form of recording answers.

3. Availability of statistical characteristics of test tasks. It is known in advance what the complexity of the proposed task is, whether it will be performed equally by weak and strong testees or not (ability to differentiate), etc.

4. Availability of special scales, which are correlated with standardized norms for summarizing test results.

5. Availability of measurement accuracy estimates (measurement errors). With the help of statistical methods, we can evaluate the measurement error, and based on the results of the assessment, we can accept or not accept the test results ...” [4].

We support the opinion of T. Kanivets that the success of the process of pedagogical assessment of educational activities, regardless of the forms, is largely connected "...with the mandatory observance of the principles of planning; systematicity; objectivity; differentiation; openness, and the assessment system itself must comply with the principle of integrity, which is based on the constant monitoring of the results of educational achievements of future specialists..." [3]. During practical work in educational institution, guided by the values and recommendations of the Bologna Declaration, the attitude of teachers and students of pedagogical specialties towards the possibilities and prospects of pedagogical assessment of learning outcomes with the help of e-technologies was monitored.

Table № 1.

*Survey on teachers' and students' attitude to pedagogical assessment using ICT*

Survey questions	Low, %		Medium, %		High, %	
	Teachers	Students	Teachers	Students	Teachers	Students
1. Level of familiarization with modern distance learning technologies	7	2	21	46	22	2
2. Level of familiarization with the capabilities of using distance learning technologies in pedagogical assessment	4	13	36	32	10	5
3. Level of psychological readiness to use distance technologies in pedagogical assessment of students' learning outcomes	15	3	21	44	15	3
4. Level of understanding of the importance of distance testing	3	1	22	15	25	34
5. The level of skills needed for the test bank preparation	10	48	25	2	14	1
6. The level of need in the introduction of additional training;	15	10	29	26	7	13
7. Level of technical support for teaching (learning)	0	1	32	42	18	7
8. Level of motivation to use distance technologies in teaching or learning	35	1	14	36	0	14
9. Level of digital competence self-assessment	15	4	25	45	11	0
10. The level of effectiveness and objectivity of pedagogical assessment results using distance learning technologies;	4	5	32	37	15	7
11. The level of reliability of determining the real abilities of students using distance technologies	14	7	21	42	15	1

The sample of the survey was made by full-time and part-time higher students – 100 people and members of faculty. Monitoring was carried out using an anonymous online survey. The task was to evaluate one's own attitude to the question on a scale from 1 to 12 points (1-4 low level, 5-8 – average, 9-12 – high). Table № 1 shows the recalculation of points for low, medium and high levels in percentage. It can be seen from the 4<sup>th</sup> line that the highest level of understanding of the importance of distance testing of students was found in 54% of teachers. At the same time, teachers' and students' understanding of the importance of distance testing of students is not at a low level.

As we can see from line 7, the technical support of teaching or learning is mainly at the medium level. The results of the self-analysis on point 8 showed that the teachers do not have a high level of motivation to use e-technologies in teaching. This can be explained by a low level of experience in their application and a lack of understanding of its necessity. The analysis of the survey on the self-assessment of digital competence of teachers showed that 29% of teachers and 8% of students rated their level of digital competence as low. As can be seen from the 10<sup>th</sup> row of the table, 29% of teachers highly evaluate the level of effectiveness and objectivity of the results of pedagogical assessment using distance learning technologies. The analysis of the results of monitoring the opinions of the educational process actors shows that both teachers and students are cautious about the organization of midterm assessment with the help of e-technologies. Among the reasons could well be insufficient level of psychological readiness, unreliability of technical equipment, insufficient capacity of the Internet network, low digital competence. Despite the fact that students, due to their age, are



more active in the field of using digital content, there are still students with low computer literacy, lack of opportunities to use Internet resources due to the remoteness of their place of residence. Teachers have a desire to use distance learning technologies in testing, but are practically not ready to perform the preparatory function, that is, to professionally prepare tests for assessment. A positive aspect of the assessment with the help of e-technologies is that the same requirements are imposed on all students. This helps them to avoid excessive worries (because everyone worries about not getting too difficult a question), makes it possible to use time more efficiently, and encourages self-control. However, as noted by researchers [1], testing is better used to reveal knowledge of facts. To determine the ability to creatively use the acquired knowledge, other assessment methods are more effective [1].

At the current stage of training students, test tasks that require a creative answer and the ability to synthesize the acquired knowledge and apply it in solving practical tasks are highly valued. Therefore, the preparation of educational tests should be a team effort: teachers, employers and students. This will greatly contribute to the proper quality of writing assignments that would require students to demonstrate creative skills and learning outcomes provided by the discipline program and could not be successfully completed by copying answers from other sources. The number of test tasks should cover the full scope of the academic discipline, and if it is a comprehensive exam, then a number of academic disciplines. Test tasks should be graded by complexity. If there is a technical possibility in the selected remote platform of the examination assessment, the students can be given the right to start taking the exam at the time of their choice in a certain interval (for example, 5 people between 10 and 11 o'clock, etc). The maximum duration of the examination by the student from the moment of its commencement must be the same for all students. If the exam task contains creative questions, the duration of the exam can be increased. And we must always remember that pedagogical assessment should help the student of higher education assess his or her knowledge and skills, and give the opportunity to creatively implement the acquired knowledge and skills. During the preparatory work and conduct of assessment, it is mandatory for the working group and the teacher during to adhere to the principles of the code of fairness formulated by the American Educational Research Association, which is laid down in the APA Standards [9]. The Code separately provides guidance to test developers and test users in four critical areas: A. Design and selection of appropriate tests. B. Test Administration and Test Scoring. C. Reporting and interpretation of results. D. Informing examinees. Also, based on the principle of the competence approach, it is necessary to take into account the opinion of American experts in the field of pedagogical assessment (The Standards for Educational and Psychological Testing, 2014), who recommend a comprehensive approach to the development of tests to be based on the following components: "... basic – determines the significance of the test, reliability/accuracy of the obtained result, measurement error calculation. It requires compliance with objectivity, honesty and correctness of the testing procedure; operational – ensures the development of: testing design and forecasting of its future development; score scales, their combination, rationing, elimination, reduction; administration, reporting, interpretation of results, accompanying documentation; rights and obligations of test participants and test users; procedural – reflects the practical application of tests, in particular: psychological testing and assessment during hiring and certification; in determining the level of competence by profession; using tests to evaluate programs, education policies and accountability..." [1]. We support the opinion that "... the role of educational testing with the help of digital technologies should not be overestimated, because no technique or the most perfect program can objectively and fairly evaluate the results of a student's education [6].

The inner state of a person, their experiences, emotions, logic of thinking and the base of knowledge, abilities and skills of a student can be comprehensively perceived, understood and evaluated only in a live manner. Testing, the use of digital technologies in the pedagogical assessment of students can be efficiently employed when appropriate however, Its application requires high professional competence. "A distant English learning course", developed by the faculty of Foreign Languages and Military translation department at the National Army Academy can be considered as a best practice. It is a holistic course, developed on the basis of methodically organized educational

information environment. Among the benefits of the Moodle learning management system, which implements the philosophy of “pedagogy of social constructivism”, is primarily the effective organization of interaction between teacher and students. In the process of preparing and conducting testing, educational managers must "create an atmosphere of proper motivation for educational activities, both for students and faculty" [19]. This will contribute to the formation of competence in language and critical thinking.

### **Conclusions and perspectives for further research**

During the empirical study, the experience of organizing pedagogical assessment of students of higher education in conditions of limited opportunities for live communication was studied and systematized. It was established that in accordance with present day challenges, institutions of higher education (state-owned) demonstrate a high level of organization of the educational process online using Internet resources. The resources of the communication platforms MS Teams, ZOOM, Google Meet, Skype, etc. are widely utilized. However, the analysis of the survey shows the readiness of participants of the educational process to organize and conduct pedagogical assessment requires systematic improvement. Analysis of the current state of assessment in the system of pedagogical education indicates a lack of experience in the effective use of pedagogical measurement and assessment methods common in the United States, Great Britain, Germany, and the Netherlands, especially pertaining test methods. There is a real need to use the developments of international educational organizations in compliance with relevant educational standards. Among the problems that inhibit this process, are the following: lack of highly qualified personnel; insufficient level of readiness of the educational process stakeholder for this form of control; difficulty in forming project groups for the development of educational tests; lack of national standards; weak feedback and insufficient motivation of teachers and students. For the effective use of distance learning technologies, it is necessary to expand the possibilities of providing relevant educational services by the systems of higher pedagogical and postgraduate education regarding the proper mastery of modern digital technologies, which will contribute to increasing both the professional and psychological readiness of the educational process participants to carry out pedagogical assessment. Further research could be aimed at studying the innovative experience of creating pedagogical conditions to develop modern didactic tools and forms of using ICT in pedagogical diagnostics.

### **СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ**

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**Совгар О.**

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### **ЗАСТОСУВАННЯ ІКТ В ОЦІНЮВАННІ НАВЧАЛЬНИХ ДОСЯГНЕНЬ З АНГЛІЙСЬКОЇ МОВИ ЗДОБУВАЧІВ ВИЩОЇ ОСВІТИ**

У статті проаналізовано роль та місце педагогічного оцінювання в організації освітнього процесу у ЗВО. Визначено, що об'єктивні результати оцінювання є важливою складовою у формуванні компетентнісного підходу до професійної підготовки сучасного спеціаліста. Розглянуто узагальнені теоретичні розробки вітчизняних і зарубіжних науковців із зазначеної проблеми, аналіз яких доводить, що педагогічне оцінювання завжди займало чільне місце в наданні освітніх послуг. Зазначається, що незважаючи на те, що впродовж тривалого часу основними формами оцінювання у закладах вищої освіти були вступний, поточний, семестровий контроль, а також підсумкова атестація, цифровізація освітньої системи та об'єктивні умови зумовили впровадження педагогічного оцінювання з використанням інформаційно-комунікаційних технологій. Глобальна пандемія, а також війна в Україні спонукають до розширення можливостей та підвищення якості педагогічного оцінювання результатів навчання здобувачів вищої освіти за допомогою технологій дистанційного навчання. Тому проаналізовано стан і потенціал освітнього оцінювання; досліджено результати вимірювання результатів навчання з використанням технологій дистанційного навчання у закладах вищої освіти. Виявлено належні умови для дистанційного навчання студентів за допомогою різних систем менеджменту навчання (Moodle, Brightspace, Docebo, Edmodo, Schoology) у ЗВО України. Водночас опитування стейкхолдерів освітнього процесу підтвердило гіпотезу про те, що викладачі та студенти не зовсім готові сприймати педагогічне оцінювання, яке здійснюється за допомогою технологій дистанційного навчання, що значно ускладнює об'єктивне оцінювання та здійснення контролю результатів навчання за відсутності спілкування «наживо». Задля задоволення вимог сьогодення запропоновано низку заходів щодо підготовки та проведення педагогічного оцінювання з метою визначення результатів навчання здобувачів освіти із використанням цифрових технологій.

**Ключові слова:** педагогічне оцінювання, результати навчання, технології дистанційного навчання, інформаційно-комунікаційні технології

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