Zh. E. Zulpykhar
L.N. Gumilyov Eurasian National University
Astana, Kazakhstan
Candidate of pedagogic sciences, Associate professor

Z.F. Abdikhalyk
L.N. Gumilyov Eurasian National University
Astana, Kazakhstan
Doctoral student

PEDAGOGICAL CONDITIONS FOR THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE ASSESSMENT OF UNIVERSITY'S STUDENTS

Abstract: In the modern educational context, information and communication technologies (ICT) have become an integral part of the educational process in universities. The article considers the use of ICT when evaluating students. which requires certain pedagogical conditions to ensure the effectiveness and fairness of evaluation procedures.
Key words: pedagogical conditions, ICT, evaluation, student, educational process.
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Introduction

Nowadays, the use of information and communication technologies (ICT) has become an integral part of the educational process in higher education institutions. The peculiarities of modern infrastructure of higher education consist in the orientation on the formation of competences, information, communication and technological components, as well as in the active interaction of students with each other and with the teacher [1, p. 1].

ICT development allows applying the latest methods and approaches to student assessment, which significantly increases the efficiency of the educational process.

Internationally, the UNESCO Institute for Information Technologies in Education (UNESCO IITE), established in 1997 [2], deals with the introduction of ICTs at all levels of education and in various sectors of education.

Relying on information and communication technologies opens up new possibilities for improving learning. The creation of a wide range of online resources, including interactive assignments, video lessons and tests, contributes to deep student engagement and improved learning outcomes. One important aspect of using information and communication technology is the ability to reduce subjectivity in student assessment. Automatic checking of work and the use of objective assessment criteria helps to eliminate arbitrariness and guarantee a fair and unbiased result. As a result, students receive a fair assessment of their knowledge and skills and can better understand what aspects they need to focus on to improve their performance.

Thus, the use of information and communication technology in the educational process leads to the deepest learning of knowledge and skills and also promotes objectivity in the assessment of students. This helps to create a more effective and equitable

learning system that delivers quality results and prepares students for future challenges and success in life.

Main part

Modern technology has changed the teaching process as it offers many different tools that can be used in the classroom to enhance learning to a great extent. Technology allows teachers to assess students in terms of their performance in the classroom. The use of ICT in assessment is now widespread where digital devices are used to help in setting assessment tasks for students. It helps in the performance of assessment tasks. ICT has the ability to provide assessments or feedback for students [3, p.].

One of the key pedagogical conditions for the successful use of ICT in student assessment in higher education is the provision of sufficient technical base consisting of modern computer hardware, software and stable high-speed Internet connection. The availability of such a technical base provides an opportunity to conduct a variety of assessment activities such as online tests, e-workshops, webinars and other forms of interactive interaction between teachers and students.

The use of ICT provides a number of additional opportunities for individualisation of learning, formative assessment and self-assessment. New interactive teaching and assessment tools (forums, case studies, webquests) imply a qualitatively different activity of students - their creative interaction in the course of mastering information, creating a new product and its promotion [4, p. 63] (joint preparation of demonstration materials, presentations, videos, etc.). New opportunities are provided by the use of video (video cases, webinars and film fragments containing typical situations to be analysed) and online tests with a developmental component, for example, with subsequent analysis of test results and essay writing [5, p. 63] essay writing [5, p. 108-110]. In addition, the use of ICT in student assessment can significantly simplify the process of collecting and analysing data, which helps teachers to assess students' knowledge and skills more accurately and objectively.

As a result, the use of ICT in student assessment at HEIs contributes to improving the quality of education and training highly qualified specialists who meet the modern requirements of the labour market. The university should be equipped with modern computers, software, Internet access and other technical means that allow the assessment process to be carried out effectively.

The second important condition is the mandatory availability of qualified teachers who are willing and able to apply information and communication technologies in the process of student assessment. Teachers must have appropriate computer literacy and in-depth knowledge of the specifics of using a variety of applications and programmes in the assessment process.

In addition, the third key condition is of significant importance - the development and use of electronic tests, assignments and cases, which provide an opportunity to obtain objective and complete data on students, their level of knowledge and skills. These electronic tools and materials make it possible to assess in detail the intellectual progress of students, as well as the effectiveness of the learning process. They provide teachers and educators with an extensive set of opportunities to assess and analyse learning outcomes and make informed decisions to improve the quality of education. Electronic assessment forms can automate the process of checking work, reduce the likelihood of errors and speed up assessment results.

An important factor that plays an important role in the context of creating a quality educational environment of higher education institution is not only to preserve the privacy and confidentiality of students' data, but also to actively ensure the reliable protection and security of personal data when using information and communication technologies in the process of assessment and verification of students' academic achievements [6].

The use of such technologies in student assessment opens up countless opportunities to implement the principles of individualisation of education, which means taking into account the individual abilities, needs and pace of learning of each student.

However, at the same time, it is necessary to ensure that the use of ICT in the assessment process complies with all security standards and ethical principles in order to guarantee the safety of students' data and the protection of their personal information from unauthorised access or leakage. In this context, the university should act not only as a provider of educational services, but also as a guarantor of security and reliability of ICT use, taking into account the peculiarities of working with students' personal data. This implies the availability of appropriate infrastructure for data protection, application of modern encryption methods and access control systems, as well as providing appropriate IT staff aware of the latest trends and risk factors in the field of information security. Only in this way can an effective and secure learning environment be provided, which will contribute to the individual development of students and enhance the level of education as a whole.

Higher education institutions direct their activities towards finding innovative ways to customise learning content and pedagogical technologies, academic support and individual educational needs of students [7, p. 39]. Generation Z is used to using personalised learning services and is not ready to receive standardised educational services. In this context, personalisation takes on a broader

meaning than the previously known individual approach to learning [8, p. 33].

Educators can develop personalised assignments and tests, taking into account the peculiarities and needs of each student. Completing this assignment allows for more detail and elaboration, as well as deepening the understanding and significance of the text presented. By enriching sentences with additional details and examples, we can better reveal the essence and context of the original message. This will help to better understand and grasp the meaning of the original sentence and realise its importance. The learning of knowledge and skills is a complex and multi-faceted process that we can enhance and make more effective.

In addition, ICT can increase the accessibility of student assessment. Online test and assignment formats provide students with the opportunity to take assessments at their convenience and from any location, which is particularly useful for distance learning. This flexibility in scheduling assessment activities opens up a wide range of options for students, allowing them to learn at a pace that best suits their own lifestyle and circumstances.

The use of ICT in the assessment process offers several key benefits that contribute to the achievement of a quality and up-to-date education for students.

Firstly, accessibility is one of the key benefits of using ICT. Through online formats, students can access assessment materials and complete assignments at their convenience, without having to be present at the institution. This is particularly relevant for students who are in remote locations or have mobility limitations.

Secondly, objectivity plays a significant role in the use of ICT. Online tests and ICT-assisted assignments allow students' answers to be automatically assessed using certain criteria. This minimises the possibility of subjective influence of the teacher on the assessment results and provides a more objective understanding of the student's skills and knowledge. Thirdly, individualisation is an integral part of the use of ICT in the assessment process. Online formats allow students to be tested according to their level of proficiency and progress. Automatically identifying problem areas and providing real-time feedback help students improve their performance and focus on the skills they need. Finally, efficiency is an important aspect of using ICT in the assessment process. Storing and analysing data from students allows teachers to assess their progress and adapt the learning process to achieve the best results.

Combining effective assessment methods with the use of ICT provides an optimal and sustainable education for students that is relevant to today's demands and challenges. Comprehensive application of ICT as a learning and management tool is possible when building an information and educational environment of an educational organisation that fully meets the information needs of the subjects of the learning process [9, p. 44] and applying appropriate learning models [10, p. 24]. In summary, there are many advantages of using online formats and information and communication technologies in student assessment in higher education. These innovations not only facilitate the assessment process, but also provide students with convenience, objectivity, individualisation and increased efficiency in learning, contributing to quality and modern education.

Conclusion

In the modern educational context, information and communication technologies (ICT) have become an integral part of the educational process in higher education institutions. The use of ICT in student assessment requires certain pedagogical conditions to ensure the effectiveness and fairness of assessment procedures. The following main pedagogical conditions were considered in the article:

1. Developing digital culture of teachers: organising training sessions and trainings for teachers on the use of ICT in assessment. Supporting teachers in developing digital skills and integrating technology into teaching activities.

2. Creating an ICT infrastructure: providing a modern technical base for online testing, webinars, electronic submission of work and other assessment tasks. Ensuring a stable internet connection and access to necessary software tools.

3. Developing interactive assessment tools: creating adaptive tests and assignments that integrate multimedia elements and interactive response forms. A variety of assessment forms, including projects, presentations, e-portfolios and other interactive forms.

4. Transparency and fairness: developing clear assessment criteria that are accessible to students. Use of electronic journals to regularly update and publish assessments.

5. Active student engagement: use of collaborative online projects and discussions to assess group skills. Systems for feedback and discussion of results to enable students to participate in the assessment process.

6. Data security and privacy: developing security policies to protect student data when using ICT. Ensuring confidentiality in online examinations and testing.

7. Continuous feedback: conducting regular feedback sessions to evaluate the effectiveness of the use of ICT in assessment. Making adjustments to methods and technology according to experience and feedback.

8. Research and application of new technologies: actively researching and introducing innovative technologies into the assessment process. Co-

operation with research groups and companies to develop advanced assessment tools.

Thus, the pedagogical conditions for the use of information and communication technologies (ICT) in the assessment of students in higher education play an important role in the modern educational system.

Observance of these pedagogical conditions contributes to the successful use of ICT in student assessment in higher education, promoting the effectiveness of the educational process and preparing students for the digital society.

References:

1. Belogurov, A.Yu. (2016). Strategy and methodology of professional development of teachers throughout life [Text] / A.Yu. Belogurov. *Pedagogy*, 2016, № 7, pp. 58-64.

2. (2013). *Information and communication technologies in education: a monograph /* Under. Ed. Badarcha Dendev. (p.320). Moscow: IITO UNESCO.

3. Majid, Ishfaq (2020). *ICT in Assessment: A Backbone for Teaching and Learning Process*. 01. P. 38-40.

4. Emelyanova, I. N. (2015). Formation and assessment of the quality of professional education in the context of the competence-based model of training. *Education and Science.* 2015. №1 (120).

5. Mogilevkin, E.A., Sadon, E.V., & Novgorodov, A.S. (2013). Student as a subject of professional development: instrumental means of formation and control of competences. *Territory of New Opportunities*. 2013. №5 (23).

6. Boronenko, T.A., Kaisina, A.V., Palchikova, I.N., Fedorkevich, E.V., & Fedotova, V.S. (2021). *Fundamentals of digital literacy and cybersecurity: textbook.* (p.431). St. Petersburg: Pushkin LSU.

7. Tareva, E.G. (2017). *Intercultural approach in the paradigmatic system of modern socio-humanitarian knowledge*. Dialogue of Cultures. Culture of dialogue: Man and new sociohumanitarian values: Collective monograph. (pp.17-44). Moscow: NEOLIT.

8. Bulaeva, M.N. (2018). Professional culture of the student's personality: social aspect / M.N. Bulaeva, A.V. Lapshova. *Innovation Economics: prospects of development and improvement,* 2018, № 6(32), pp. 32-36.

9. Starichenko, B. E. (2012). On the construction of information support of the educational process in higher education. *Pedagogical Education in Russia*, 2012, № 5, pp. 39-44.

10. Starichenko, B. E. (2013). Synchronous and asynchronous organisation of educational process in higher education institution on the basis of information-technological model of teaching. *Pedagogical Education in Russia*, 2013,№ 3, pp. 23-31.

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