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## ENHANCING FOREIGN LANGUAGE ASSESSMENT IN TECHNICAL UNIVERSITIES: A DIGITAL APPROACH

*The article explores the growing role of digital technologies in assessing the foreign language proficiency of students at technical universities. It highlights the limitations of traditional assessment methods, such as the focus on memorisation and the lack of personalised feedback, and argues for the benefits of integrating digital tools. The study provides a comprehensive analysis of various digital tools and platforms that can be used to assess language competences in a technical university. These tools are aimed at improving the efficiency of knowledge control and ensuring unbiased assessment. The analysis encompasses learning management systems (LMS), massive open online courses (MOOCs), interactive tools, grammar checkers and analytical systems, with the popular online platform Classtime employed to demonstrate the functionality and benefits of digital assessment in practice.*

*The article emphasises the transformative potential of digital technologies in improving the foreign language learning process, especially in technical universities. By strategically integrating traditional and digital assessment methods, teachers can create a more personalised, accessible and interactive learning experience that meets the diverse needs of students. The effectiveness of these tools, as the article points out, depends on thoughtful integration that takes into account the individual characteristics of students and promotes their engagement. The paper further underscores the significance of integrating automated and traditional assessment methods, emphasising the value of self-reflection among students. This integrated approach, it is asserted, holds great promise in fostering more comprehensive and adaptive educational practices in the context of foreign language teaching at technical universities. The study offers a set of recommendations that are designed to facilitate effective assessment in this particular learning environment.*

**Key words:** digital technologies, knowledge assessment, foreign languages, technical universities, educational process.

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## ВДОСКОНАЛЕННЯ ОЦІНЮВАННЯ ЗНАНЬ З ІНОЗЕМНИХ МОВ У ТЕХНІЧНИХ УНІВЕРСИТЕТАХ: ЦИФРОВИЙ ПІДХІД

Стаття досліджує зростаючу роль цифрових технологій в оцінюванні рівня володіння іноземними мовами студентами технічних університетів. У ній підкреслюються обмеження традиційних методів оцінювання, таких як орієнтація на запам'ятовування та відсутність персоналізованого зворотного зв'язку, а також аргументуються переваги інтеграції цифрових інструментів. У дослідженні проведено комплексний аналіз різних цифрових інструментів і платформ, які можна застосовувати для оцінювання мовних компетенцій в умовах технічного університету. Ці інструменти спрямовані на підвищення ефективності контролю знань та забезпечення неупередженого оцінювання. Аналіз охоплює системи управління навчанням (LMS), масові відкриті онлайн-курси (МВОК), інтерактивні інструменти, засоби перевірки граматики та аналітичні системи. Проілюстрована функціональність та переваги оцінювання знань студентів на прикладі використання популярної онлайн-платформи Classtime.

У статті підкреслюється трансформаційний потенціал цифрових технологій у вдосконаленні процесу вивчення іноземних мов, особливо в технічних університетах. Стратегічно інтегруючи традиційні методи оцінювання та методи оцінювання з використанням цифрових інструментів, викладачі можуть створити більш персоналізований, доступний та інтерактивний навчальний процес, який відповідає різноманітним потребам студентів. Ефективність цих інструментів, як зазначається в дослідженні, залежить від продуманої інтеграції, яка враховує індивідуальні особливості студентів та сприяє їхньому залученню. У роботі також підкреслюється важливість інтеграції автоматизованих і традиційних методів оцінювання, наголошуючи на цінності саморефлексії серед студентів. Такий інтегрований підхід, як зазначається, має великі перспективи у сприянні більш комплексним і адаптивним освітнім практикам у контексті викладання іноземних мов у технічних університетах. У статті представлено низку рекомендацій щодо ефективного оцінювання в цьому конкретному навчальному середовищі, пропонуючи цінні ідеї та поради як для практиків, так і для науковців.

**Ключові слова:** цифрові технології, оцінювання знань, іноземні мови, технічні університети, навчальний процес.

**Problem statement.** Digital technologies are becoming increasingly pervasive in all areas of life, including the sphere of education. The integration of these technologies has the potential to create new opportunities for educators and students, thereby enhancing the accessibility, interactivity and efficacy of the educational process.

The importance of digital technologies in education is a subject that has been the focus of much debate in recent years. The personalisation of learning is a significant factor in this regard. Digital tools enable the creation of personalised learning programmes, which are adapted to the individual characteristics of each student.

Furthermore, integrating interactive tasks, games and simulations has been demonstrated to enhance motivation in learning environments. Moreover, the increased accessibility to knowledge through digital technologies has been identified as a key factor in facilitating learning in real time and from any geographical location. Finally, the development of digital competencies, including information skills, critical thinking and creativity, is a key benefit of digital learning.

Controlling the students' knowledge is an integral part of the educational process. It makes it possible to assess the level of mastery of the material, identify gaps in knowledge and adjust the learning process. Traditional methods of knowledge control have their advantages, but they cannot always provide a complete and objective assessment of students' learning achievements. Modern education requires more flexible and diverse assessment methods, which will allow for assessing not only knowledge but also students' skills and competences. The use of digital technologies to assess the foreign language competence of students at technical universities is becoming increasingly relevant and necessary.

**The objective** of this study is to analyze the available digital tools for assessing language competencies in a technical university when teaching a foreign language and to identify ways that would enhance the efficacy of knowledge control, thereby facilitating a thorough and impartial evaluation.

**Previous publications on the topic.** The issue of the implementation of information technologies in the system of controlling students' knowledge has been extensively explored by numerous authors in the context of scientific publications. Agostini, Lazareva, Picasso (Agostini et al., 2024, pp. 1–7) and Mahamuni, Parminder and Tonpe (Mahamuni et al., 2024, pp. 1–5) state that technology-enhanced tools, including AI-driven assessments and gamification, promote personalized learning experiences and continuous feedback.

Desireé J Cranfield, Isabella M Venter and John Mulyata examine the impact of Conversational Artificial Intelligence (CAI), particularly the rise of ChatGPT, on higher education, focusing on how it necessitates a fundamental shift in student assessment practices. They emphasize the need for a rethinking of student assignments and assessment methods to effectively integrate CAI into the higher education landscape while maintaining

academic integrity and fostering student learning (Cranfield et al., 2024, pp. 1097-1105).

Marchisio, Barana, Floris, Marellò, Pulvirenti, Rabellino, Sacchet, and Floris consider an automated assessment system designed for language learning, which includes self-assessment questions and immediate feedback, which can improve language skills in technical universities. It emphasizes the integration of technology into language teaching through different effective typologies of questions (Marchisio et al., 2019, pp. 403–410).

Synekop, Koval, Matviienko and Zenia emphasize the value of digital tools in modernizing the assessment of English language skills in education, leading to more efficient, objective, and student-centred learning experiences. The researchers claim that tools like Moodle, Google Forms, and Zoom facilitate testing, provide instant feedback, and allow for diverse task types, improving the assessment of professionally oriented English competence (Synekop et al., 2023, pp. 20–25).

**Presentation of the main material. Pedagogical control of knowledge represents a fundamental stage in the educational process, enabling educators to evaluate the students' level of competence and, subsequently, optimise the learning process based on the obtained data.**

Traditional methods of testing knowledge, such as written examinations, oral interviews and test papers, have long been the main means of assessing students' academic performance. However, with the development of technology and changing educational requirements, the effectiveness of these methods has been increasingly questioned. The authors of more recent studies have proposed that traditional assessments primarily focus on rote memorization and final scores, which may not reflect a student's true understanding or skills (Ding, 2024, p. 68) and they cannot often provide personalized feedback and adapt to individual learning needs (Mahamuni et al., 2024, p. 3).

Increasing the efficiency of students' knowledge control when learning a foreign language is one of the key tasks of modern language education. This is due to several factors, which we will consider below.

**Individualisation of learning:** Each student is unique and learns information in his/her way. Effective monitoring allows us to identify the strengths and weaknesses of each learner and to adjust the learning process.

**Motivation:** Regular assessment helps students see their progress and stay motivated. Positive results stimulate further learning, and the identification of gaps allows correcting them in time.

**Feedback:** Knowledge monitoring provides valuable feedback to students and teachers. Students understand what they have learnt well and what they still need to work on. Teachers can adjust their methodology and choose more effective exercises.

**Evaluating learning effectiveness:** The results of the monitoring allow us to evaluate the effectiveness of the teaching materials and methods used. This helps to optimise the learning process and achieve better results.

**Preparing for exams:** Regular supervision prepares students for final exams, allowing them to adapt to different forms of assignments and reduce their anxiety levels.

Modern alternative assessment methods have been shown to facilitate a more flexible and effective learning system that takes into account the individual characteristics of each student and develops the competences required for the future. In the context of distance learning, digital technologies are the primary instruments through which pedagogical control is exercised (Meljnyk, 2022, p. 219).

For effective control of students' knowledge, advanced educational technologies offer a wide range of tools. The following is a list of some of the most popular tools:

#### Online learning platforms

**LMS (Learning Management System):** The cornerstone of digital learning, The Learning Management System is a digital platform that facilitates continuous monitoring of results, the number of classes completed, and tackles student progress (Kunycjkyj, n.d., Retrieved December 15, 2024).

**MOOCs (Massive Open Online Courses)** are another popular option, offering free online courses to a wide audience and frequently utilising automated assessment systems to evaluate knowledge. The field of learning analytics employs digital trace data, which is indicative of student behaviour within the online learning environment, to enhance comprehension of the student learning process. The viewing of videos, the completion of tests and the submission of comments are all actions that can be systematically tracked, extracted and analysed, thereby facilitating a more profound understanding of how students learn (Kennedi, n.d., Retrieved December 22, 2024).

#### Interactive tools

Interactive tools such as quizzes and surveys offer a rapid method of assessing students' knowledge and obtaining feedback.

**Simulations:** The implementation of simulators in educational settings enables students to practise in real-world environments, thereby facilitating the assessment of their competencies by instructors.

Interactive whiteboards are a valuable tool for educators, as they facilitate engaging lessons and enable instantaneous assessment of student knowledge.

#### Tools for checking written work

Grammarly is an English language writing assistant software tool. It performs a range of functions, including the review of spelling, grammar and tone in a written piece, as well as the identification of potential instances of plagiarism (Wikipedia. Grammarly, n.d., Retrieved January 4, 2025)

**Turnitin.** The provision of flexible solutions is of benefit to educators, as it enables them to design and deliver student assessments in a manner that aligns with their principles and with a high level of confidence (Turnitin. We are Turnitin. n.d., Retrieved January 7, 2025).

#### Instruments for the generation of feedback

Commenting platforms enable educators to provide detailed feedback on student work, explaining errors and offering recommendations.

**Chatbots** are computer programmes that can answer students' questions, check homework, and provide individualised feedback.

**Analytics systems** are designed to collect and analyse data on student progress, identify gaps in knowledge, and adjust the learning process. Analytics systems are playing an increasingly important role in modern education, especially in the context of distance learning and the use of digital platforms (Adamo Software. How Data Analytics in Education Transforms Education. n.d., Retrieved January 9, 2025).

We continue our study with a more detailed analysis of the online learning platform that is most frequently implemented in our pedagogical practice. Classtime is a flexible online platform that functions as an online teacher's assistant, facilitating the administration of online assessments and the instantaneous evaluation of the class's and students' progress. It enhances the lesson by providing real-time visualisation of comprehension and progress. The following features are of particular

significance: firstly, the platform offers a wide range of assessment and knowledge formation possibilities, with a focus on the development of thinking skills. Secondly, the interface is intuitive and easy to use. Thirdly, the platform provides 10 question types and 16 interface languages. Finally, it offers 12 flexible settings for each unique session (lesson), the ability to add audio, video, and pictures to tasks, and the introduction of mathematical chemical, physical formulas, an open library with tested questions, integration with Google Classroom, grouping students into classes, detailed reporting, namely exporting results to Excel, PDF, individual student reports, gamification of the learning process (puzzles and team games), collecting feedback from students after the session (U chomu riznycja mizh Classtime ta Kahoot? n.d., Retrieved January 11, 2025). It should be noted that the tasks in the test can be randomised at the request of the teacher to prevent cases of academic dishonesty. The introduction of automated assessment mechanisms eliminates subjectivity, thereby ensuring equal conditions for all students.

The advantages of computer technologies in testing are evident. For instance, they enable university teachers to be liberated from the time-consuming routine work involved in conducting examinations and the interim assessment of knowledge within the context of the traditional organisation of the educational process. Moreover, computer technologies serve as the primary means of pedagogical control in distance learning. The implementation of testing in the digital educational environment offers several key advantages. Primarily, it automates the processing of results, ensuring objectivity in the control system and facilitating rapid assessment of the quality of students' professional training in the discipline. The analysis of test results enables educators to identify sections and individual topics of the discipline that present challenges for students and to implement effective remedial measures based on the outcomes of these tests. Consequently, the use of testing systems in the digital educational environment is conducive to the assessment of students' knowledge levels.

It is imperative to acknowledge that no digital tool can fully substitute for face-to-face communication between educators and students. Modern technology should function as a valuable complement to traditional assessment methods, rather than a total replacement. To enhance the

efficacy of knowledge control, the following measures are recommended:

Combine traditional and advanced assessment techniques. For example, use online tests to test theoretical knowledge and practical tasks to assess the ability to apply knowledge in practice. When assessing technical terminology, consider combining online tests to test knowledge of terms with an essay on a technical topic.

Combine automated and manual checking: automated systems can check grammar and vocabulary, while the teacher assesses the content and originality of the work.

In preparation for a research conference, students can write drafting abstracts, submit them for review through an automated text analysis system, and subsequently present their abstracts at the conference.

It is imperative to prioritize the cultivation of self-assessment competencies. Students must be equipped with the ability to evaluate their existing knowledge and identify areas for further improvement. For instance, a portfolio can be a valuable tool for students to collect their work and analyse their progress. The formation of self-control skills as a means of activating independent cognitive activity is ensured by the student's determination of a specific goal, i.e. learning a foreign language at a professional level. Therefore, during the course of study students are engaged in independent cognitive activity at all stages of their learning activities. Accordingly, students begin to study a foreign language in more detail, independently apply various types of knowledge control, analyse their mistakes, and possible shortcomings in their work and clearly understand the level of their knowledge of a foreign language (Valijova, 2024, p. 104).

It is recommended that a variety of task formats be implemented, as this will allow for the assessment of different aspects of students' knowledge and skills.

The administration of timely feedback is instrumental in facilitating students' awareness of their errors and enhancing their understanding of the knowledge they lack.

Digital technologies have significantly changed the language teaching process, offering new ways of assessing students' knowledge. However, to achieve maximum effectiveness, it is necessary to carefully analyse and select the appropriate tools, taking into account the specifics of teaching at a technical university.

**Conclusion.** Traditional methods of knowledge control are not outdated, but they need to be supplemented and improved. The combination of traditional and modern methods will create a more effective system for knowledge evaluation, thereby contributing to the enhancement of educational quality. Assessment is a critical component of the educational process, serving as a fundamental feedback mechanism that enables all stakeholders to comprehend the subject material being taught and determine the optimal allocation of learning resources. The efficacy of assessment tools is

contingent upon the specific objectives of the instructor (Yefimova et al., 2021, p. 205).

The use of digital technologies to test students' knowledge of a foreign language in technical universities is a promising area of development in modern education. It allows for more efficient learning, making it more interesting and accessible to students. However, their use requires a comprehensive approach. It is necessary to combine different tools, to take into account the individual characteristics of students and to create conditions for their active involvement in the learning process.

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