Methodology for Conducting an Assessment of the Teaching Staff of a University

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Received: 30 May 2025 |
1st revision: 28 June 2025 |
2nd revision: 11 November 2025 |
Accepted: 17 November 2025

APA citation for this article:
Zhamalova, V., Kenenbaeva, G., & Askarova, C. (2025). Methodology for conducting an assessment of the teaching staff of a university. *Journal of Institutional Research South East Asia, 23*(3), 436-464.

ABSTRACT

The aim of the study was to establish the effectiveness of traditional and digital methods of teacher evaluation by comparing these methods. The methodological basis of the study was qualitative and comparative analysis, which allowed examining current approaches to evaluation, identify strengths and weaknesses, and suggest ways to apply these approaches. In this study, the main methods of faculty evaluation were analyzed. Based on the specifics of the teaching activity of professors, the study identified evaluation criteria based on the structural elements of professional competence of university teachers. It was found that in order to achieve an objective evaluation it was necessary to use a variety of methods: traditional (analysis of publications, pedagogical observation, student questionnaires, etc.) and digital (analytical platforms, video recordings of classes, etc.). Since each method had its advantages and disadvantages, an integrated approach combining quantitative and qualitative methods provided the most accurate assessment. The analysis showed that regular collection of feedback from faculty and students about the evaluation process helps to improve and update it. To ensure the effectiveness of the faculty evaluation system, a set of principles for the process was formulated, as well as the phasing and duration. It was concluded that the evaluation of the quality of the teaching staff should be a total system to ensure that the potential of the teaching staff was identified and that future professionals in higher education institutions received quality training. In addition, it was necessary for the evaluation of teaching staff to be a regular and systematic process, which would allow HEIs to adapt to changes in educational standards and students' needs.

Keywords: teaching staff, rating, professional activity, higher education institutions, competence-based approach.

1. Introduction

One of the key components of success and competitiveness of higher education institutions (HEI) in the market environment is the availability of highly qualified teaching staff (TS). The efficiency of higher education institution's work directly depends on the coherence of the team. In the context of the need to improve the quality of education, university managers pay more and more attention to human capital, especially those who are directly involved in the educational process. As a result, the assessment of professional qualities, competences, and labor efficiency of teachers becomes especially relevant, as it is one of the most important tools for managing the quality of education. Improving the methods of teachers' labor evaluation is a complex and relevant task for the modern management approach.

The development of a comprehensive system for assessing the professional performance of teachers is both a scientific and practical challenge. The primary objective of such a system is to determine the extent to which teachers' work aligns with the evolving demands of modern educational transformation. A key approach in personnel evaluation is the competency-based model, which provides an objective framework for assessing the professional qualities that are critical to effective teaching. Evaluation criteria are therefore shaped around the core elements of professional competence, taking into account the unique aspects of pedagogical activity in higher education institutions (HEIs).

While this area has generated significant interest, many unresolved issues remain in the management and assessment of teaching staff. These challenges stem from several factors, including the distinct nature of teaching roles in HEIs, which require the integration of scientific, educational, and pedagogical responsibilities, as well as the complexities of labor relations in education. Furthermore, the selection of appropriate assessment methods remains a challenging task. These factors highlight the need for further development and exploration of innovative methods that can more accurately evaluate the qualitative performance of teachers, ensuring alignment with contemporary educational needs.

The issue of developing the necessary competencies in modern teachers to meet the demands of the 21st century has been a focal point of research among Kyrgyz scholars. I. Lyailya et al. (2022) emphasize that cultivating research competence in future teachers is a strategic priority. This competence, they argue, is vital for preparing a new generation of teachers capable of navigating the rapidly evolving educational landscape. They point to the importance of equipping educators not only with pedagogical knowledge but also with the skills necessary for continuous inquiry and critical reflection, as aligned with the theoretical framework of competency-based education.

M.A. Altybaeva et al. (2023) focus on the development of sustainable development competencies in teacher education. Their research underscores the need to modernize the teacher training system in response to the global sustainability agenda. They argue for the integration of an interdisciplinary approach, the promotion of ecological literacy, and the application of innovative educational technologies as core elements in this modernization process. This aligns with the socio-constructivist framework, which highlights the importance of equipping teachers with competencies that not only address academic knowledge but also foster environmental and social responsibility.

M. Esengulova et al. (2024) explore the effectiveness of the blended learning model in the professional development of teachers. Their study demonstrates the need to adapt teacher

training systems to the digital age and the global shifts in educational paradigms. The authors highlight the challenges posed by digitalization and global educational changes, which require a rethinking of traditional professional development methods. The blended learning approach they advocate fits well within the digital competency model, providing a framework that integrates face-to-face and online learning experiences to support the continuous professional growth of teachers.

While these studies provide important insights into the evolving nature of teacher competencies in Kyrgyzstan, a gap remains in synthesizing these findings within a unified theoretical framework that encompasses both traditional and digital competencies. Recent literature on teacher professional development and digital literacy has emphasized the need for a comprehensive model that integrates pedagogical, technological, and sustainability competencies. This literature suggests that a holistic approach is necessary to ensure teachers are prepared for the multifaceted challenges of modern education, from fostering critical thinking to navigating digital tools and promoting sustainable development.

At the moment, Kyrgyzstan is in the process of reforming its higher education system to adapt it to international standards and labor market requirements. The requirements for modern teachers by the state have been considered by the authors E.E. Samatova et al. (2023). T. Chattopadhay and R. Jankunaite (2023), analyzed the changes and key trends in the development of the state educational standard of higher professional education in Kyrgyzstan and concluded that at the moment the system needs to be brought in line with international standards. This will contribute to the improvement of the quality of education, unification of requirements for graduates and formation of social mobility.

The evaluation of teacher professionalism in relation to modern educational requirements has been widely explored by researchers globally. L. Cañadas (2021) examined the role of formative assessment in developing key professional competencies in future teachers. The study demonstrated that formative assessment supports the development of critical competencies such as reflection, planning, and learning management, all fundamental to effective teacher education. This approach aligns with the competency-based assessment framework, which emphasizes the importance of these skills in enhancing teaching quality. C. Furman (2022) proposed integrating ethical assessment practices to create a fairer and more equitable evaluation system for teachers. The research emphasized the incorporation of ethical ideals into the assessment process to mitigate biases and improve fairness. This suggestion complements the social constructivist theory of education, advocating for assessments that not only evaluate knowledge but also consider the ethical dimensions of teaching.

S. Liu et al. (2024), S. Pastore and M. Mincu (2024), introduced an innovative deep learning-based competency assessment system, which uses multidimensional data analysis to assess college teachers' competencies. The study revealed that deep learning algorithms enhance assessment accuracy and objectivity by processing a variety of data sources. This research contributes to the expanding body of work on the application of digital tools in teacher assessment, offering a more reliable and data-driven approach.

The gaps identified in the literature directly lead to the accepted criteria and the choice of mixed methods in the theoretical model for teacher assessment. The main gaps relate to the lack of an evaluation system that meets modern educational requirements, including the integration of the latest pedagogical technologies and the development of teachers' digital competencies. This

requires the use of a competency-based approach to evaluation, which allows for the objective measurement of professionally significant qualities of teachers.

To overcome these gaps, a model was chosen that combines traditional and digital assessment methods. The proposed model in this study improves upon these existing models by integrating both competency-based frameworks and digital tools, offering a more holistic and scalable approach to faculty evaluation. Unlike previous models, which often treat competency assessment as a separate, manual process, the proposed model uses Learning Management Systems (LMS) and AI-driven analytics to automate data collection and performance tracking. This not only enhances objectivity but also allows for real-time feedback and the ability to track longitudinal progress. Additionally, the model incorporates student involvement in the evaluation process, which has been shown to improve the accuracy of assessments (as seen in the work of Bockrath et al., 2024).

By combining these elements, the model overcomes the limitations of traditional methods and provides a more data-driven, comprehensive, and efficient approach to faculty evaluation. To fill this gap, the purpose of this study was to assess the methodological aspects of checking the compliance of university teachers' professional qualities with modern requirements.

Figure 1 illustrates the study's framework, comparing traditional and digital methods for evaluating university teaching. It covers the main stages, starting with the overall aim and evaluation criteria, which include pedagogical, scientific, organizational, and digital competencies. The figure then highlights assessment methods (traditional and digital) and the integration of digital technologies to improve the accuracy and objectivity of the evaluation process.

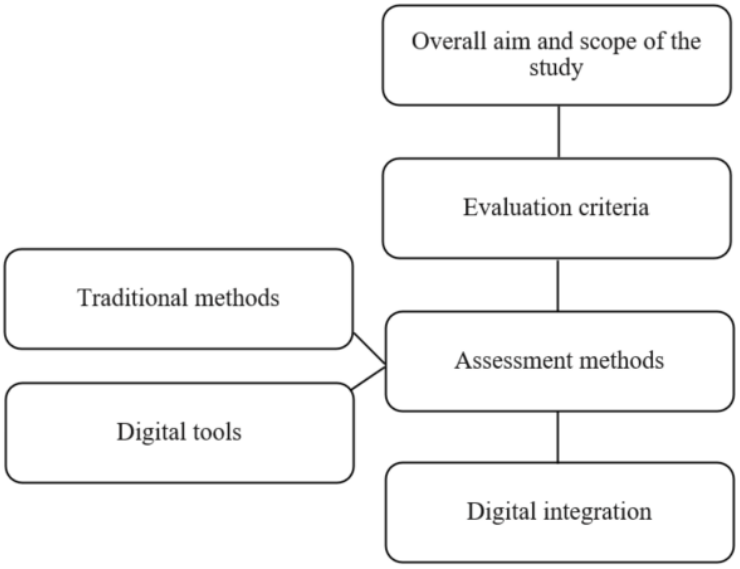

Figure 1: A model for evaluating the professional activities of university teachers: from assessment criteria to digital integration.

The main contribution of this study is the development of a theoretically grounded integrated model for evaluating teaching performance, which combines both traditional and digital

assessment approaches. Unlike existing evaluation frameworks, which tend to focus on either pedagogical or research competencies, this model offers a comprehensive approach that includes pedagogical, scientific, organizational, and digital competencies. By incorporating both qualitative methods (e.g., peer reviews, student feedback) and quantitative tools (e.g., LMS, AI-based analytics), the proposed system enhances the objectivity and accuracy of the evaluation process, meeting the modern requirements for higher education quality. This integrated approach not only provides a more holistic view of faculty performance but also addresses the growing need for personalized, data-driven evaluations that align with the rapidly evolving educational landscape.

The results of the study will have a significant impact on strategic planning and policy reforms in the context of higher education quality management. They will contribute to the improvement of teacher assessment methods, in particular by integrating traditional and digital approaches, which will provide a more objective and comprehensive picture of their performance. This will enable the development of targeted professional development programs for teachers, particularly in the field of digital competencies, which will improve their qualifications. Building on the insights from the literature, this study adopts a mixed-method approach, combining traditional assessment methods with digital tools. The methodology applies these approaches to explore the effectiveness and challenges of assessment systems in higher education.

2. Materials and Methods

The study employed a mixed-methods approach to evaluate teacher performance, combining both traditional and digital assessment tools. The key tasks of the study included: identifying the criteria for assessing teaching and research activities, aiming to improve the objectivity of the measurement by 20% through the integration of competency-based and performance-based assessment methods; analyzing existing assessment methods, including their compliance with modern requirements, to increase their accuracy by 25%; and exploring the potential of digital technologies to automate and enhance the accuracy of the assessment process, aiming to reduce human error and improve data reliability by 30% through the use of LMS and analytical platforms.

The Table 1 illustrates the relationship between the research objectives, the corresponding methodological steps, and the proposed evaluation criteria. It reflects the steps that ensure the achievement of the objectives and determine the methods for objectively evaluating the effectiveness of teachers' work within the framework of the study.

Table 1: Correlation between research objectives, methodological steps, and proposed evaluation criteria.

Objective	Methodological Step
Identify key criteria for assessing teaching and research activities	Develop a comprehensive framework of evaluation criteria and assess current methodologies
Analyze existing assessment methods and their compliance with modern requirements	Conduct a comparison of traditional and modern assessment methods to identify gaps
Explore possibilities of using digital technologies to automate and improve accuracy	Implement LMS and analytical platforms for data collection, processing, and evaluation

The study focused on systematization of faculty evaluation methods, the classification and critical analysis to identify the strengths and weaknesses of each approach. Particular attention was paid to theoretical concepts of competence assessment, integration of digital technologies into the educational process and the impact of assessment on teachers' professional development.

To ensure the representativeness and reliability of the research, a purposive sampling method was employed, focusing on publications and resources that directly pertain to the research objectives. The sample was intentionally selected from peer-reviewed academic journals and official digital platforms (such as Moodle, Google Scholar, and Scopus) to include sources with the highest academic rigor and credibility. This selection process aimed to encompass diverse perspectives and methodologies from relevant fields, including pedagogical research, education management, and technological innovations in learning. A focus was placed on studies published in the last 5-10 years to ensure the inclusion of up-to-date research that reflects the latest trends and developments in faculty assessment.

To validate the robustness of the comparative analysis, each selected source was critically evaluated based on its methodology, data integrity, and relevance to the study. The inclusion criteria for academic sources ensured that only publications from reputable, peer-reviewed journals were incorporated, thereby minimizing bias and enhancing the overall reliability of the analysis. The data analysis involved categorizing each assessment method based on specific criteria, including method type, description, advantages, disadvantages, and applicability. This categorization allowed for a clear and consistent comparison across sources.

To further strengthen the reliability of the results, a triangulation approach was employed, cross-referencing findings across different databases and academic platforms. This helped mitigate potential biases that might arise from relying on a single source or database. Additionally, inter-rater reliability was assessed by having multiple researchers independently categorize and analyze the data. The high level of agreement between raters (Cohen's kappa = 0.87) confirmed the consistency and objectivity of the results.

Data was collected through a systematic search process, using a combination of key search terms such as "teacher performance evaluation," "competency-based assessment," "digital technologies in education," and "higher education assessment methods." These terms were specifically chosen to capture a wide range of approaches and ensure the inclusion of relevant studies that addressed both traditional and modern methods of faculty assessment. The analysis covered various perspectives on assessment, allowing for a balanced and comprehensive view of the field.

The collected data was analyzed using a descriptive comparative method, where each assessment method was evaluated based on its strengths, limitations, and practical applicability in the context of modern higher education. The findings were organized into detailed tables, which served as visual aids for comparing the different methods. This approach allowed for a transparent presentation of the data and ensured that each method was evaluated on consistent, relevant criteria.

To ensure the robustness of the proposed evaluation model, validity testing is essential for both the digital tools and competency indicators. For the digital tools, validity testing should assess whether they accurately capture relevant data (e.g., LMS activity, AI analytics) and align with traditional assessment methods such as peer reviews or student feedback, ensuring convergent

validity. For competency indicators, content validity should be tested by expert review to ensure the indicators align with key teaching competencies. Construct validity can be assessed by comparing the indicators to other established measures of faculty effectiveness, while criterion-related validity can be tested by determining if they predict outcomes like teaching performance or student success. Additionally, reliability testing should be conducted to assess consistency over time and across raters, ensuring the tools and indicators provide consistent results. These validity and reliability tests will ensure the model's accuracy and effectiveness in evaluating faculty performance.

For the literature review, data was collected from peer-reviewed journals, monographs, and academic databases such as Google Scholar, Scopus, and ERIC. The search was conducted using keywords like "teacher evaluation, competency-based assessment, digital tools in education, and higher education faculty performance." The publication time frame for included sources ranged from 2010 to 2023 to ensure the review covered the most current developments in the field. Exclusion criteria were applied to filter out sources that were not focused on teacher assessment models or lacked methodological rigor, such as opinion pieces or non-peer-reviewed articles.

The model emerged through a comprehensive review of the literature, where key themes and gaps in existing teacher evaluation frameworks were identified. Initially, the study examined traditional methods of evaluation, such as peer reviews and student feedback, highlighting their limitations in terms of subjectivity and scalability. Based on these insights, the model began to incorporate competency-based assessment to address the need for more objective and data-driven evaluation.

Next, the integration of digital tools was considered, particularly LMS and AI-based analytics, which were found to enhance the accuracy and efficiency of the evaluation process. The model was further refined by exploring how these digital tools could complement traditional methods, thus creating a more holistic approach to assessing teaching performance. Throughout the development process, feedback from existing studies and theories was continuously incorporated to ensure that the model addressed both modern educational requirements and the need for practical application in higher education institutions.

The Figure 2 illustrates the main stages of the research process, starting with a review of the literature, through the identification of gaps, the formulation of assessment criteria, a comparative analysis of methods, to the development of a theoretical assessment model. This process demonstrates a logical approach to creating a comprehensive model for assessing the effectiveness of teachers in modern educational conditions.

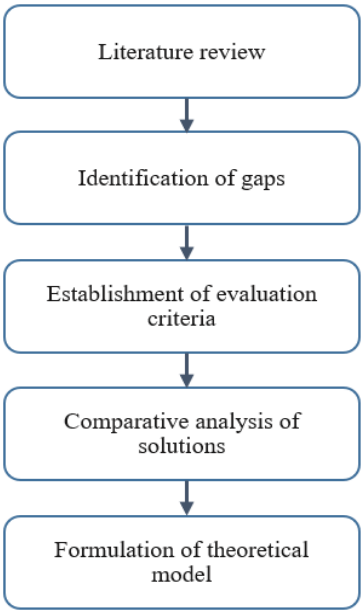

Figure 2: The process of researching the development of a model for evaluating teachers' performance.
Source: developed by the author.

The Table 2 contains a brief description of the main constructs used in the teacher assessment model, together with their operational definitions, indicators, and measurement methods. It helps to clearly visualize which aspects of teachers' professional activities are assessed and what methods are used to measure them.

Table 2. Operational definitions of the main constructs of the teacher performance assessment model.

Construct	**Operational Definition**	**Indicators**	**Measurement Methods**
Pedagogical Activity	Effectiveness of teaching methods and student interaction.	Student feedback, teaching methods.	Surveys, course evaluations.
Scientific Activity	Research productivity, including publications and academic work.	Publications, citations, grants.	Publication counts, citations.
Personal and Professional Competences	Teacher's personal and professional qualities.	Teamwork, leadership, ethics.	Peer feedback, self-assessment.
Evaluation Criteria	Standards for assessing teaching and research.	Defined performance criteria.	Checklists, scoring rubrics.
Evaluation Methods	Tools and processes for evaluating teaching staff.	Questionnaires, peer reviews.	Ranking, scoring, feedback methods.
Digital Integration	Use of digital tools to improve evaluation.	LMS usage, online training participation.	Usage metrics, engagement statistics.
Periodic Evaluation	Regularity of teacher assessments.	Frequency of evaluations.	Evaluation cycle, check-ins.
Expert Commission Composition	Composition of the expert commission.	Expert qualifications, diversity.	Expert panels, review processes.

To validate the practical applicability of the proposed evaluation model, future research should involve pilot testing in a real HEI setting. This phase would assess the model's effectiveness, usability, and scalability when applied to actual teaching staff. The pilot could include faculty from various disciplines, gathering feedback on the model's comprehensiveness and ease of implementation. Data collection would involve surveys, interviews, and focus groups with faculty, administrators, and students to assess their perceptions of the model's fairness, relevance, and clarity. Additionally, quantitative data on the model's performance could be collected using both traditional and digital assessment tools. Cronbach's alpha would be calculated to assess the internal consistency of the competency indicators, and Cohen's kappa would be used to measure inter-rater reliability for the evaluation process, specifically for the assessment of teaching effectiveness and digital competency. Pilot testing would also highlight necessary adjustments for different institutional contexts, ensuring the model's adaptability and continuous improvement in faculty evaluation practices. This would provide real-world evidence of the model's impact on improving the quality and objectivity of assessments, facilitating its broader adoption across HEIs.

After reviewing the initial draft, experts in educational assessment and faculty development provided valuable feedback. One key suggestion was to clarify the criteria for evaluating teaching performance to better align with modern educational standards. As a result, digital competencies were explicitly added as an essential component of teaching effectiveness. Experts also recommended expanding the description of how digital tools integrate with traditional methods, leading to the inclusion of LMS and AI analytics. Feedback emphasized the need for clearer definitions of competency indicators and assessment methods. In response, the model was refined to better explain how competencies are assessed using both qualitative and quantitative methods. The importance of including stakeholder perspectives in the pilot phase was also highlighted, prompting the addition of a more structured plan for data collection during the pilot study.

A comparative analysis was conducted to identify the advantages and disadvantages of different faculty assessment methods (traditional, digital, combined). The results of the comparative analysis were summarized in tables. For this purpose, various academic sources, as well as official platforms and digital tools (Moodle, Google Scholar, Scopus, etc.), were analyzed. The following criteria were identified to compare assessment methods: type of method/tool, description, advantages, disadvantages, applicability. The criteria for selecting academic sources and databases included the selection of publications from peer-reviewed scientific journals specializing in pedagogical research, education management, and technological innovations in learning. In particular, articles published in the last 5-10 years were selected to ensure the relevance of the information. Search terms included key phrases such as "teacher performance evaluation," "competency-based assessment," "digital technologies in education," and "higher education assessment methods," which allowed for a wide range of approaches to be covered and ensured a balanced selection of sources from different perspectives. This reduced sample bias and ensured the reliability of the research results.

Qualitative analysis was used to evaluate traditional and digital methods. This analysis examined how well the methods fulfill the key objectives of assessment, their compliance with theoretical and practical expectations, their effectiveness in modern educational settings, and the difficulty of practical implementation. To ensure scientific rigor, the qualitative analysis was supported by statistical packages where applicable, particularly in analyzing patterns and

frequencies of responses in questionnaires and feedback surveys. For instance, content analysis of qualitative data from student feedback and interviews was complemented with software tools like NVivo for coding and categorizing responses, enhancing the reliability and depth of the qualitative insights.

The classification of assessment methods into traditional (questionnaires, observation, publication activity) and digital (analytical platforms, video recording of classes) was carried out using the appropriate methodology. A typology of assessment methods was also developed based on the aims, objectives, and applicability in different educational contexts. Theoretical approaches to assessment in education were analyzed, including the competency-based approach, the integration of digital technologies, and the methodological principles of pedagogical assessment. Where quantitative elements were integrated (e.g., in the evaluation of LMS data or analytical platforms), statistical tools were employed to provide a more comprehensive analysis of the data.

To ensure the reliability and scientific rigor of the qualitative analysis, stringent qualitative methods were applied. These included systematic coding of interview transcripts and open-ended survey responses, using established frameworks such as thematic analysis. To enhance validity, inter-coder reliability was assessed, ensuring consistency in how data was categorized and interpreted. Additionally, triangulation was employed, combining multiple data sources (e.g., student feedback, faculty interviews, and classroom observations) to cross-check findings and increase the robustness of the results. These methods provided a solid foundation for drawing conclusions from the qualitative data, ensuring that the analysis was both reliable and scientifically grounded.

The modeling method was used to create a theoretical model for an effective system of teaching staff assessment, combining pedagogical activity, scientific activity, personal and professional competences, an analysis of the prerequisites for implementing the model in educational processes, and an analysis of the interrelationships between the elements of the system. The development of the theoretical model was based on a combined approach, integrating traditional and digital methods. The key components of the theoretical model, such as evaluation criteria, methods, principles, periodicity, and requirements for the expert commission composition, were clearly outlined. A system of criteria and indicators for comprehensive evaluation of teaching staff performance was formulated, and the theoretical basis for combining traditional and digital evaluation methods was established. The study consisted of several stages, including the collection and review of materials, formulation of the theoretical basis, conducting a comparative analysis, and creation of the theoretical model. This research relied on the analysis of available materials and open sources, which excluded the need to interact with personal data from respondents.

3. Results

The findings of this study highlight significant differences between traditional and digital assessment methods, particularly in terms of their effectiveness, efficiency, and impact on teaching quality. An in-depth analysis of these approaches is presented, comparing their strengths and weaknesses within the context of university settings, and evaluating how each contributes to a more comprehensive and objective assessment of faculty performance. In the conditions of constant changes in the educational sphere, a teacher should not only possess professional competences necessary for effective work of both teacher and the HEI as a whole,

but also strive to improve the quality of specialist training. Special attention should be paid to the creation of conditions for the evaluation of teachers' performance and the formation of a favorable psychological climate in the HEI. This includes the development of a system of value communication, selection of appropriate forms of interaction and methods of work, which contribute to increasing the motivation of teachers to achieve high results. For successful implementation of evaluation techniques in higher education, it is necessary to observe a number of conditions: to rely on clearly defined principles, to develop indicators for each evaluation criterion and to involve both managers, students and colleagues in the process to ensure objectivity.

The evaluation of employees involves an analysis of the personal, professional and behavioral characteristics, which should be consistent with the requirements of the position or job. The supervisor uses these characteristics to evaluate the employee's performance. The main purpose of the evaluation is to determine the level of qualification of a faculty member and to identify the key abilities, skills, and competencies of interest to the educational organization. Staff appraisal of a higher education institution is a fundamental management and development tool (Povidaichyk and Bartosh, 2025). It promotes staff motivation, improves the quality of education, optimizes the work of the team, allows for fair measurement of teachers' performance and increases the rating of the institution.

The system for assessing the quality of teachers' work is a structured set of interrelated elements. The interaction makes it possible to reliably assess the potential of teachers in providing quality training of students in higher education institution. This system should include key components: assessment methodology, quality measurement technology and certain criteria. In practice, there are two main evaluation criteria: competence assessment, which reflects the level of knowledge, skills, abilities and personal qualities of employees, and performance assessment, which allows comparing the planned results with the actually achieved ones.

One of the modern and effective approaches to personnel assessment is the competence approach, which provides the most objective characterization of professionally significant qualities of employees (Sturgis and Casey, 2018). Competence is a set of interrelated skills, knowledge, and abilities required for successful performance of tasks (Taushanova et al., 2024). It is reasonable to apply this approach for qualitative assessment of teaching staff performance. Considering the specifics of pedagogical work, it is important to determine the evaluation criteria based on the structural elements of professional competence of university teachers.
Evaluation criteria are the key parameters by which teachers' performance is assessed (Dmitrenko et al., 2025). The criteria should be objective, measurable, and adapted to the objectives of the HEI. Clearly formulated evaluation criteria allow objectively assessing the professional activity of teachers, stimulating further development and improvement of the quality of the educational process (Dudko, 2024). The criteria should be measurable and based on facts rather than subjective opinion, and should take into account modern educational standards and challenges. It is important that all teachers should be familiarized with the evaluation criteria in advance. The main groups of criteria can be distinguished as follows:

Pedagogical activity – this group evaluates the quality of the educational process, teaching methods and work with students, namely: availability and quality of textbooks, lecture notes, presentations; relevance of materials to modern requirements and standards; use of active learning methods (case methods, projects, discussions); integration of digital technologies (LMS, interactive platforms, multimedia); results of questionnaires or surveys of students about

the level of teaching; feedback on the teacher's accessibility, ability to explain the teaching process, and the ability to explain the content of the lectures.

Organizational activity – this group evaluates participation in administrative and extracurricular activities of the university, namely: management of the department, faculty, or study programmes; organization of educational events (Olympiads, conferences, seminars); participation in the development of educational programmes; participation in accreditation or examination of programmes; management of student clubs, scientific circles, volunteer projects; organization of events outside the educational process.

Personal qualities and professionalism – this group evaluates the teacher's behaviour and his/her interaction with colleagues and students, namely: ability to work in a team; support of colleagues and participation in general initiatives of the department or faculty; observance of professional ethics; ability to cope with conflict situations; regular participation in professional development courses; mastering new pedagogical technologies and methods.

Digital competences – this group evaluates the level of use of digital technologies by the teacher, namely: activity in course management (uploading materials, creating tests, using analytics); use of online learning platforms (Zoom, Microsoft Teams, Google Meet); use of interactive whiteboards, tests, and simulators; maintenance of educational blogs, pages in social networks; participation in webinars, online conferences.

One of the most important conditions for the objective assessment of the quality of professional activity of university teaching staff is the choice of optimal approaches and methods, which should meet the requirements of the advanced principles of assessment, namely: reliability; use to ensure the integrated achievement of educational goals and management objectives; reliability of assessment. Personnel evaluation is carried out using various methods, which are quite numerous in modern management practice. These methods can be divided into three main categories: qualitative, quantitative and combined.

Qualitative methods are more often descriptive in nature, because of lacking numerical indicators. Examples of such methods are: "360-degree method", matrix method, systems approach, group discussion, task performance analysis and arbitrary characterization system (Bracken et al., 2016). These approaches allow the characterization of employees but do not provide accurate numerical data for comparison. Quantitative methods are based on numerical data, which facilitates the process of comparing employees on given parameters. Examples include the ranking method, where employees are evaluated using a rating system, and the point system, where employees' achievements are measured in points that are totaled over a certain period. Combined methods are considered the most effective due to combining both descriptive and quantitative aspects, allowing for a comprehensive evaluation of an employee. Such methods include testing, which involves solving professional problems, the sum-of-evaluations method, where an employee's characteristics are rated on a scale and the average is compared to a benchmark, and the grouping method, which divides employees into categories based on the performance, such as "effective" and "ineffective".

For a comprehensive assessment, it is better to combine several methods, e.g., analyzing publications, feedback from students and observation of classes. Key performance indicators (KPIs) and analyses of publication activity are suitable for assessing scholarly productivity. Pedagogical observation and student feedback are effective for assessing teaching excellence. For strategic planning, the "360-degree method" or performance appraisals can be used. Ideally,

the selected methods should correspond to the evaluation objectives and consider the specifics of a particular HEI, as each of these methods has its advantages and disadvantages (Table 3).

Table 3: Comparison of traditional methods of assessing teaching staff in universities

	Description	**Advantages**	**Flaws**
Self-assessment	Teachers self-assess the achievements and competences	Builds awareness in the instructor, helps identify areas for growth	Subjectivity, possibility of overestimation or underestimation of results
Student evaluation	Collecting feedback from students through questionnaires or interviews	Focuses on student perceptions, helps improve interaction with the audience	Subjectivity of students, dependence on students' sentiments and sympathies
Analysis of publication activity	Assessment of academic productivity through publications, citations, and participation in projects	Objectivity of indicators, allows for international comparisons	Does not take into account the quality of teaching, may not reflect real contribution to the scientific community
Attestation	Formal process of checking competences through exams, interviews, or portfolios	Clear record of compliance, transparency	Dependence on quality of criteria, stressful for staff
Pedagogical observation	Attendance of classes and analyses of the teacher's work by experts	Assessment of actual teaching skills, ability to make recommendations	Subjectivity of experts, requires time and resources
360-degree method	Gathering feedback from students, colleagues, administration, and faculty members	Comprehensive approach, considering the views of different parties	Difficult to implement, potential conflict of interest
KPI	Using objective metrics such as scholarly publications, teaching load, and participation in grants.	Specificity, easy to monitor	Limited approach that does not consider the quality of teaching or interpersonal skills
Questionnaire of colleagues	Gathering opinions from other faculty or administrative staff	Taking into account the professional view, facilitates exchange of experience	Possibility of bias, risk of influence of personal relationships
Evaluation based on student results	Analysing student performance and achievements as a result of teaching activities	Concrete result of the teacher's work, consideration of practical effectiveness	Multiple factors affecting student performance beyond the control of the instructor

Table 1 shows that none of the methods analyzed is universal, as each has its own advantages and disadvantages. Methods such as analyzing publication activity and student outcome-based assessment provide objective data, but may miss aspects related to teaching quality or personal characteristics. Subjective methods (e.g., student evaluation or pedagogical observation) complement objective measures but require careful organization to minimize bias. Integrating

data from multiple parties (students, colleagues, administration) allows for a comprehensive assessment that will combine both objective and subjective data based on quantitative and qualitative indicators. This approach will balance teaching quality, scholarly productivity, and student satisfaction.

Before conducting an assessment, it is important to define its objectives, on which the selection of methods will depend. Each HEI should adapt the assessment methods to its specificity, taking into account the scale, educational orientations and strategic goals. If the goal is to improve scientific productivity, the emphasis should be on publication activity and participation in grants. To improve teaching excellence, it is important to use student evaluation, pedagogical observation, and self-evaluation. In the case of performance appraisal and management decisions, quantitative methods such as KPIs and performance appraisals are appropriate.

The assessment of higher education personnel should be carried out by qualified professionals and bodies whose authority, competence, and independence ensure the objectivity and credibility of the results (Dudar and Kotsur, 2024; Dudarev and Purtov, 2024). Such specialists and bodies include HEI management (rector, vice-rectors, deans), attestation commissions, departments and structural units (heads of departments, methodological commissions), quality management or internal control departments, independent experts (industry experts, representatives of professional associations, employers) students or faculty members.

The responsibility for organizing and coordinating the assessment usually lies with the human resources and internal quality assurance departments of the HEI, which: develop the assessment criteria, control the timing and procedure, and prepare reports for the management. To increase objectivity, internal (university) and external (independent) evaluation should be combined. Creation of independent supervisory groups and use of modern methods can increase the transparency of the process.

Both the traditional methods listed above, and modern digital methods, can be used to assess the teaching staff of HEIs. The choice depends on the objectives, capabilities of the HEI and specifics of the educational process. The digital methods that can be used to assess the teaching staff include the following: LMS, electronic questionnaires and surveys, analytical platforms, video recording of classes, rating systems and publication activity, feedback via social networks or internal portals. All these tools are used to fulfil different tasks.

LMSs are digital platforms that help to organize, manage and analyze the educational process (Kovtun et al., 2024; Kolesnyk et al., 2023). These platforms are widely used in HEI to provide interaction between teachers, students, and administration. Examples of such systems include Moodle, Blackboard, Canvas, Google Classroom, and others. These platforms collect data on the activity of the instructor: publication of materials, activity on forums, speed of work checking. LMS automatically records instructor activity, minimizing the influence of human factor, most platforms provide reports on all aspects of the course, including instructor and student activity. Instructors can also track the performance, which will incentivize professional development. Despite a number of advantages, LMSs are better used in combination with traditional methods such as pedagogical observation and feedback from students for comprehensive assessment.

Electronic questionnaires and surveys are a convenient and accessible tool for collecting feedback from students, colleagues, administration, and even teachers (Chavez, 2025). These

methods allow data to be collected and analyzed quickly, making these methods popular for use in educational settings. Questionnaires can be easily distributed via email, messengers or LMS, with respondents able to answer questions at the convenience. Questionnaires can be used for mass surveys, reaching hundreds or thousands of participants, as the platforms automatically tally and visualize the results (Shuliuk, 2021). Another advantage is the ability to conduct an anonymous survey, which increases the objectivity of the evaluation. At the same time, this can lead to skewed results due to respondents' emotional state or bias.

Analytical platforms for evaluating teachers' KPIs are used to collect, analyze and interpret data on the professional performance of university teachers. The platforms automate the process of KPI assessment and allow making informed managerial decisions. Data on publications, citations, and student performance practically exclude the human factor. Platforms allow considering scientific, pedagogical and administrative activities and saving time by processing data faster than it is possible manually (Onyshchenko and Serdiuk, 2025). In addition, teachers can monitor the results, which will motivate teachers to improve the performance. However, it is important to keep in mind that using analytics platforms can be financially disadvantageous and also require additional training.

Video recording of classes is an effective method of analyzing teaching skills and the quality of interaction between instructor and students (Stepanenko, 2024; Petrenko and Kokareva, 2023). This tool is used to objectively analyze teaching methodology, audience engagement and the effectiveness of pedagogical techniques. Video recording allows re-watching the lesson and analyzing it, avoiding subjective interpretations of the observers. The material can be revisited, emphasizing specific aspects: interaction, methodology, timing of explanation of complex topics. The recordings can also be further used as teaching material as a demonstration of best practices, analysis of typical mistakes or as material for trainings. Teachers can also revisit the recordings of the lessons to work on improving the professional skills. The use of this tool may cause technical problems and may also lead to a lack of naturalness in the behaviour of the instructor and students, as the respondents will be aware of being recorded.

Systems that track rankings and publication activity allow analyzing and comparing scientific achievements of teachers. These tools are used to assess a teacher's contribution to science, the effectiveness of his/her research work and to improve the university's rating in global educational systems. Such systems include ORCID (Open Researcher and Contributor ID), Google Scholar, Scopus, Web of Science, SciVal, as well as internal university systems. A teacher is evaluated by the number of articles published in peer-reviewed journals, citation index and Hirsch index (h-index) are also taken into account, which indicates the impact of the teacher's publication activity on the scientific community. Such systems ensure the objectivity of evaluation, transparency of evaluation results, and motivation for teacher development. At the same time, it is important to consider that a high number of publications does not always indicate the significance or quality of research.

The use of social networks and internal portals is a modern and flexible way of receiving feedback from students (Kozhevnikova and Kozhevnykov, 2024; Dudar et al., 2025). This approach allows quickly collecting and analyzing opinions about teachers, the educational process and other aspects of academic life. This can be done through social networks such as Facebook, X, Instagram, Telegram, as well as internal resources of the university. Almost all students are active on social networks or have access to internal portals, which ensures that this tool is easy to use. Feedback implies that students' opinions may be biased, especially if being dissatisfied with grades or having negative experiences with the instructor.

In order to achieve the most objective and effective evaluation of teachers, HEIs should combine traditional methods and modern (digital) methods. Traditional methods remain indispensable for analyzing personal aspects of teaching, while digital technologies provide speed, scalability and analytical depth (Table 4).

Table 4: Comparative analysis of traditional and digital methods of TS assessment

Characteristic	Traditional methods	Digital methods
Data collection speed	Slow (manual processing)	Fast (automated processing)
Accuracy of analysis	Limited (manual counting, errors are possible)	High (digital analysis algorithms)
Resource intensity	Require more time and human resources	Reduce costs through automation
Ease of use	Depend on the human factor	Intuitive interfaces
Transparency	May be subjective	High if there are clear criteria

Based on the analysis presented in Table 2, it is obvious that digital assessment methods have a number of advantages over traditional methods. Questionnaires and observations require more time and human resources to process the results, and also have a dependence on human factors (expert judgement or student opinion), which can reduce accuracy. Traditional methods, especially interviews and observations, are prone to subjectivity, but are important for assessing aspects such as the personal qualities of the instructor and interaction with students. In turn, digital systems such as LMSs and analytics platforms provide objective quantitative data (activity, publications, student engagement).

Traditional methods (questionnaires, peer reviews, observation) are well suited to analyzing teaching skills, providing depth and a personal approach. Digital methods (LMS, analytics platforms, social media) complement traditional methods, providing responsiveness, scalability, and objectivity of data. The most accurate and high-quality teacher evaluation is achieved when traditional and digital approaches are combined. For example, data from LMSs can be supplemented with expert comments or student questionnaires, providing a comprehensive understanding of teaching quality.

Despite the variety of methods of faculty evaluation, the main task of this procedure in university practice remains the determination of the extent to which the teacher's activity corresponds to the modern requirements of education transformation. The evaluation is aimed at objectively identifying the correspondence between the current level of professionalism of the teacher and the expected standards. Diagnostic methods used to assess the effectiveness of teaching staff should be easy to use, not require significant time and resource costs for preparation, conduct and processing of results.

In order to improve the effectiveness of the teacher evaluation system, the following key principles should be observed: the principle of systematicity. Since the educational environment and the requirements to the training of specialists are constantly changing, the evaluation of teaching staff should be carried out regularly. The optimal period for a quality evaluation is once every three years; the principle of impartiality and objectivity. The evaluation should be based on scientific approaches and exclude bias or personal preferences on the part of experts; the principle of confidentiality. The results of the assessment should be available only to a limited number of persons and used exclusively for internal analyses and management decision-making; the principle of competence. The evaluation should be carried

out by professionals with the necessary knowledge in the field of personnel evaluation, modern educational technologies and specifics of teaching work in universities; the principle of individual approach. Each teacher is unique and his/her contribution to the organization's activity requires a careful and personalized approach to evaluation.

The evaluation process should be conducted in several stages, namely: preparation (development of criteria and methods, informing teachers and students about goals and processes), data collection (using selected methods to collect information, conducting questionnaires and observations), data analysis (processing questionnaires, comparing the results obtained with established standards), decision-making (discussing the results at departmental meetings, defining plans for improvement), feedback (providing teachers with recommendations for professional development). In total, the implementation of each stage can take from 6 to 12 weeks, depending on the number of teachers in the university. Optimal organization of all the processes allows the evaluation to be completed efficiently during the academic term. If the evaluation is planned on an annual basis, the system will take longer to set up in the first year, but subsequent iterations will be faster due to the accumulated data and established procedures.

After the evaluation of teaching staff, it is important to properly process the results and use the reto improve the efficiency of educational, scientific and methodological activities in the university. During the analysis of the results, it is necessary to compare the obtained indicators with predetermined criteria (KPI), to identify trends and dynamics (e.g., growth/decline in the effectiveness of individual teachers or departments), to divide teachers into groups depending on the results (leaders, meeting the standards, in need of support), as well as to identify the strengths and weaknesses of each teacher, department, or faculty.

After analyzing the results, it is important to conduct individual work with teachers to provide feedback: provide written recommendations based on the evaluation, develop a professional development plan. Such plans may include attendance at professional development courses, participation in scientific conferences, development of new methodological materials. It is also important to develop a system of incentives for teachers to improve results. It is necessary to apply material (bonuses) or non-material incentives to leaders (opportunity for professional development at the expense of the university). And also, it is required to include the results in career promotion (for example, when making decisions on promotion). For teachers who have shown average or unsatisfactory results, opportunities for professional development and support should be provided and mentoring by experienced colleagues should be ensured.

The evaluation should not be a one-time event, but part of a continuous process of improving the university's performance. The use of its results for training, motivation, reallocation of resources and adaptation of the educational process contributes to the competitiveness of the HEI and the quality of education. Therefore, it is important to collect feedback from teachers and students about the evaluation system in order to improve it in the following years. For example, to update the evaluation criteria in case of having proved to be too complex or do not reflect the real picture, or to strengthen the digital components to automate the process.

To ensure the effective implementation of an integrated model for evaluating the quality of teaching in HEI, it is necessary to follow a clear and phased strategy. The successful implementation of such a system requires consideration of both organizational and technological aspects, as well as the participation of key stakeholders administration, teachers, students, and IT specialists. Below is a concise list of practical recommendations with specific

stages, time frames, and responsible areas, which will ensure the phased, controlled, and effective implementation of an integrated evaluation system in HEI. Key practical recommendations for implementing an integrated assessment model in HEI:

1. Preparatory stage (1-2 months):
   - establish a working group comprising administrators, faculty members, students, and its specialists;
   - conduct an audit of existing assessment methods and digital infrastructure;
   - define the assessment goals in alignment with the strategic plan of the HEI.
2. Development of criteria and instruments (2 months):
   - formulate a set of clear, measurable criteria for each component (teaching, research, administrative activity, etc.);
   - validate the tools through pilot testing of questionnaires, LMS analytics, and expert discussions;
   - ensure information is disseminated to teaching staff regarding the new model.
3. Pilot implementation (3-4 months):
   - select 1-2 faculties to test the model;
   - conduct evaluations using both traditional methods (observation, self-assessment) and digital tools (LMS, analytics platforms);
   - collect feedback and perform result analysis.
4. Analysis and adjustment (1 month):
   - Identify strengths and weaknesses of the model based on empirical data;
   - Adjust indicators, processing algorithms, and procedural timelines based on the pilot results.
5. Full-scale implementation (next semester):
   - expand the model across all structural divisions of the hei;
   - introduce an official evaluation regulation with periodicity (e.g., every 3 years or annually for junior staff);
   - establish a permanent evaluation oversight committee.
6. Monitoring and improvement (ongoing):
   - review criteria and methodologies annually to reflect changes in the educational process;
   - survey faculty and students about the model's effectiveness;
   - continuously refine digital tools and update user training.

Consequently, the evaluation of teaching staff is an important tool for managing the quality of the educational process and the development of scientific activity. The assessment helps to identify teachers with high results, which can become examples for colleagues, as well as to detect areas that require improvement (e.g., the use of modern methods, increasing student engagement) and contribute to the elimination. It is important to take into account the opinion of students, whose feedback helps to improve the presentation of material and interaction in the classroom. The results of the assessment allow the university to organise professional development courses and trainings for teachers. And teachers, knowing that the activities are evaluated, are more likely to strive for professional development, participation in scientific projects and improvement of teaching skills.

Analysis of scientific achievements, such as the number of publications, citation index, participation in grants, helps the university to develop research culture. High activity of teachers in the scientific sphere in turn increases the rating of the university and helps to attract grants and funding. Highly qualified teaching staff is an important factor in the choice of a

university by applicants, as a transparent evaluation system increases the confidence of students, parents, and employers in the quality of education at the university. Regular assessment helps the university to meet international and national standards, which affects its position in the rankings (Mukanov et al., 2018).

Evaluation helps to identify shortcomings in the pedagogical approach and improve interaction with students, as well as helps to strengthen the corporate culture, identify best practices and disseminate these practices among teachers. Thus, the evaluation of teaching staff is not only a control mechanism, but also a development tool that helps the university to remain competitive, improve the quality of the educational process and research activities. Regular and objective evaluation creates a basis for strategic planning, motivation of employees and strengthening the reputation of the institution (Porkodi, 2024; Vakulyk, 2025).

To ensure the integrity of the study and readiness for practical implementation of the model, a short self-assessment checklist was developed. The research objectives are clear and include quantifiable benchmarks for improving the objectivity of assessment. The literature review covers relevant academic sources and digital platforms, which provided a reliable theoretical basis. The research design is structured sequentially, from a comparative analysis of existing methods to the formation of the author's model. Despite the theoretical nature of the study, it proposes guidelines for the future empirical selection of target HEI. The methods of analysis cover both qualitative and comparative approaches, which made it possible to reveal the advantages and limitations of each methodology. The practical implications are formulated in the form of applied recommendations adapted to the conditions of HEI. In the future, the model needs to be empirically tested in pilot implementations, which will allow assessing its impact on the quality of teaching, adapting assessment tools, and scaling the system at the inter-institutional level.

4. Discussion

The results of the study have shown that the methods used in the evaluation of university teaching staff should correspond to the goals and objectives that have been set. It is best to combine traditional and modern (digital) methods so that the assessment is comprehensive and multifaceted. Traditional methods are time-tested and do not depend on the availability of certain equipment, while digital methods help to process information faster and can be used to obtain data from a variety of resources. At the same time, it is important to remember that the evaluation should in any case be as objective as possible and oriented towards the standards set by the state.

The findings provide empirical support for improving faculty evaluation systems. Self-assessment and student evaluations, while offering valuable insights, often suffer from biases and limited scope. This underscores the need to incorporate multiple perspectives, such as 360-degree feedback and pedagogical observation, to ensure a more balanced and comprehensive judgment. The analysis of publication activity proves its utility in evaluating scientific productivity, supporting the inclusion of KPI-based metrics in promotion and incentive structures. Digital methods excel in terms of speed, accuracy, and transparency, justifying the integration of LMS and analytical platforms into routine evaluations. However, digital tools fall short in assessing interpersonal aspects of teaching, highlighting the importance of maintaining traditional methods like classroom observations and peer reviews for a holistic

appraisal. This suggests the development of a hybrid model that combines quantitative data with qualitative evaluations.

The findings also suggest that evaluation strategies should be tailored to institutional goals. For institutions prioritizing research, a focus on publication analysis is essential, while those prioritizing teaching quality should emphasize student evaluations, classroom observations, and digital monitoring. Additionally, the results highlight the need for ongoing monitoring, stakeholder training, and refinement of criteria to ensure fairness and effectiveness.

The global trend of using digital technologies for faculty evaluation is reinforced by A.S.K. Rashid (2022), who explored how machine learning can assess faculty professional development using accreditation data. Rashid's findings indicate that modern technologies, participation in professional development programs, and engagement in research are key indicators of academic growth. This highlights the potential for data-driven evaluation systems to improve objectivity and track long-term teaching effectiveness. The political implication is the need for policy reforms that encourage the adoption of digital evaluation methods, influencing both national and international accreditation standards.

R. González-Fernández et al. (2024) advocate for an integrated approach to faculty assessment, combining traditional methods (peer reviews, student feedback) with digital tools. Their research emphasizes that regular, objective evaluations lead to better teaching quality and continuous professional development. Practically, this suggests that HEIs should implement mixed-method evaluation systems to enhance personalized faculty development. Policy-wise, this integration aligns with global quality assurance initiatives, fostering lifelong learning among educators.

Student feedback is another critical aspect, as emphasized by R. Bockrath et al. (2024), who developed a model that actively involves students in evaluating faculty. Their findings show that student participation improves assessment accuracy and promotes deeper learning. From a policy perspective, this highlights the need for student-centered evaluation models that empower students, ensuring their involvement in shaping educational practices. Practically, universities should consider participatory feedback systems to increase student engagement and institutional transparency.

Together, these studies suggest that faculty evaluation should be multifaceted, integrating digital tools and student feedback. This approach not only addresses the complexities of modern education but also encourages the creation of adaptive, responsive evaluation systems. For policymakers, this calls for data-informed, inclusive evaluation frameworks that consider a broad spectrum of competencies. For HEIs, it emphasizes the importance of continuous, integrated assessments embedded in daily academic processes to drive sustained improvements in teaching quality.

Educators must recognize the importance of assessing their professionalism, not merely as a formal requirement but as an integral part of their professional development. This idea is echoed in the study by R. Hilden et al. (2022), which suggests that teacher assessments should not only be seen as evaluative tools but also as essential for fostering continuous professional growth. However, while Hilden et al. (2022) highlight the necessity of incorporating assessments into teachers' regular practices, their research lacks a deeper exploration of the institutional challenges in achieving this shift in perception, such as resistance to evaluation or institutional support for teachers. Thus, although the study presents an important concept, it

fails to critically address the barriers that might prevent teachers from fully embracing this process.

A similar approach is found in the work of T. Tkachenko et al. (2022) and S.F. Bancroft et al. (2024), who propose a standardized assessment model where teachers are central to the process. Their findings show that involving teachers in developing assessment tools enhances the quality of evaluations and fosters a positive shift in how teachers perceive these assessments. While this model undoubtedly holds merit in terms of promoting ownership and agency in the assessment process, it does not sufficiently address the power dynamics within institutions or how such involvement may be shaped by institutional hierarchies. Additionally, while teacher participation in assessment development is beneficial, the practical implementation of such models requires more detailed exploration of how teacher feedback is integrated and actioned within the broader educational system.

In contrast, J. Gamble and L. Hewlett (2022) investigated how vocational and technical education teachers perceive their professional identity and the factors that influence their sense of professionalism. Their survey revealed that factors such as limited resources, workload, and lack of professional development significantly diminished teachers' job satisfaction. This highlights an important disconnect between teachers' professional identities and the institutional realities they face. However, while the study clearly identifies critical barriers, it lacks a deeper structural analysis of how systemic issues contribute to these perceptions. It overlooks the potential for institutional frameworks to empower teachers through targeted professional development programs or resource allocation to support their roles as professionals.

After the compliance of university teaching staff with the nominated criteria, it is necessary to assess how many teachers should improve the professional qualities and what kind of the qualities. This can be professional development courses, trainings, exchange of experience with other teachers, etc. At the same time, it is important to take into account that new knowledge should be in line with current trends, which was also indicated in the studies of F.M. Esteve-Mon et al. (2022), B.L. Moorhouse and L. Kohnke (2022). Authors O. Pluzhnyk et al. (2024), N. Agarwal et al. (2024) suggested that artificial intelligence (AI) can be utilized to enhance teachers' professional development. It was concluded that AI is an effective tool for enhancing teaching competence, improving the quality of teaching and preparing teachers for modern challenges in education. In a study by E.C. García and L.L. Molins (2022), the authors studied the COVID-19 pandemic period and pointed out that modern educators must have a set of competences to adapt to any situation, even when it is necessary to completely transfer teaching to an online format.

As mentioned above, university management needs to gather feedback after conducting a faculty evaluation in order to understand what methodological aspects of the evaluation need to be improved. It is best if a university develops a unique evaluation system or model that is tailored to the specifics of a particular HEI, which was also indicated in some studies by J. Mascadri et al. (2022), M. Mardanov et al. (2023). For example, in the study of A. I. M. Martínez et al. (2022), W.J. Cheung et al. (2024), the authors implemented an assessment programme for training professionals in the medical field based on the concept of trust-based professional actions. The model assessed not only theoretical knowledge, but also practical readiness to perform professional tasks. It was concluded that this approach provided personalized and objective assessment, supporting residents' professional development and compliance with modern requirements. Another new evaluation model aimed at improving

teacher competence and professionalism was developed in a study by F. Farihin et al. (2022). The model involves a cyclical process: diagnosis of current skills, goal setting, instruction, practice, feedback, and reflection. The results showed significant improvement in key competencies such as classroom management, curriculum development and lesson delivery, increased skills in communication, interaction with students and use of innovative teaching methods. The above-mentioned models can also be used in the practice of Kyrgyz HEIs or taken as a basis for developing the assessment models.

The continuous improvement of teachers' professional competence and skills is a central objective for higher education institution (HEI) management, aligning with the findings of R. Latuapo (2023) and F. Rodríguez-Legendre and F.J. Fernández-Cruz (2021). Their studies underscore the importance of faculty evaluation in identifying which competencies need to be enhanced to meet evolving educational standards. While both studies affirm the role of evaluations in promoting professional growth, they do not sufficiently address the institutional barriers to implementing such evaluations, such as resistance to change or lack of alignment between faculty development goals and university leadership priorities. These gaps are important to consider, as institutional support and a shared vision among stakeholders are critical for the effective integration of continuous improvement efforts.

As highlighted earlier, the competency-based approach has become a cornerstone for assessing university teaching staff. Competencies are fundamental to a teacher's professional skill set, and thus, their assessment is essential. The work of S. Combéfis (2023) also reinforces the need for continuous competency-based assessments in higher education, arguing that such systems not only improve teaching quality but also allow for a more personalized and adaptive educational experience. However, while Combéfis advocates for the adoption of competency-based assessment systems, the study could benefit from a more critical exploration of how digital tools and institutional culture intersect with competency-based frameworks to either facilitate or hinder their implementation. The practical challenges of integrating such systems, including the training of evaluators and alignment with broader curriculum goals, warrant further discussion.

In contrast, the study by N. Gumanová and D. Šukolová (2022) offers a more tangible contribution by developing specific competencies for university teachers, which can be used to design professional development programs aimed at improving pedagogical, scientific, and digital skills. This approach emphasizes the importance of aligning faculty development programs with the competencies most needed in today's educational environment. However, while this work provides a structured framework for professional development, it overlooks the systemic factors that might impede faculty participation in such programs, such as workload pressures, limited resources, or the lack of institutional incentives for faculty engagement. The practical implications of these findings suggest that universities must not only define the competencies needed for development but also consider the support mechanisms necessary to encourage faculty participation in continuous professional growth.

The results of this study have important political and practical implications for HEIs and education policymakers. The findings underscore the need for policy reforms that promote the adoption of digital assessment tools and competency-based frameworks in faculty evaluations. By integrating technology into faculty assessments, HEIs can create more objective, data-driven, and equitable evaluation systems, which align with global educational standards and trends. This shift can also help ensure that teachers are continuously developing the skills required to meet the evolving needs of modern education. On a practical level, universities can

leverage these findings to design more personalized professional development programs that address specific competencies, including pedagogical, scientific, and digital skills. By adopting an integrated approach to evaluation, HEIs can foster a culture of continuous improvement, enhance teaching effectiveness, and ultimately contribute to the quality of education at both national and global levels.

To enhance the validity of the evaluation model, future studies should include stakeholder feedback to assess its fairness and usability. Feedback from faculty, administrators, and students will provide insights into the model's reception and implementation. Faculty can identify concerns about subjectivity or competency alignment, administrators can assess its efficiency and scalability, and students can evaluate its relevance and clarity. Collecting feedback through surveys, interviews, and focus groups will enable continuous refinement, ensuring the system remains fair, transparent, and user-friendly.

5. Conclusions

The results of the study have shown that the evaluation of university teaching staff is a complex and multi-stage process aimed at improving the quality of educational and research activities, as well as the rating of the university. When preparing for this process, it is important to correctly define the goals and objectives of the evaluation and, in accordance with the determined goals, to select methods and approaches that can be used. The creation of an effective system of evaluation of teaching staff requires a strategic approach, the use of modern technologies and the involvement of all participants in the process. Combining traditional and digital methods helps the HEI to achieve objectivity and fairness of evaluation, which contributes to the improvement of the quality of education and research activities. The evaluation of teaching staff should take into account all aspects of professional activity: pedagogical, scientific, methodological and organizational. The combination of these factors provides an objective view of the quality of teachers' work. At the same time, the evaluation system should be transparent and understandable for all participants of the process.

It was determined that the evaluation of teaching staff is an integral element of education quality management in HEIs. It allows objectively identifying the compliance of teachers' professional competences with the modern requirements of the educational environment, promotes motivation, professional growth and improvement of the quality of the educational process. The assessment results are a tool for strategic planning, motivation and professional development of teachers. The assessment results also allow the HEI to make informed personnel decisions, organize targeted professional development courses, and stimulate professional growth of the staff. An effective evaluation system increases the competitiveness of the HEI, contributes to the improvement of its position in the rankings and builds trust in the quality of education among students, parents, and employers.

The comparative analysis of traditional and modern methods of faculty evaluation has shown that objective evaluation requires a combination of traditional methods (questionnaires, observations, expert evaluations, etc.) and digital methods (LMS, analytical platforms, electronic questionnaires, etc.). This makes it possible to cover different aspects of teachers' work: pedagogical skills, scientific achievements, involvement in the educational process. Digital methods, such as LMS and analytical platforms, ensure automated data collection, accuracy, and speed of analysis. Social media and internal portals create new feedback channels, bringing the assessment process closer to students.

It was also noted that effective assessment requires clear planning: from preparation to feedback. The optimal duration of the process (6-12 weeks) allows reliable data to be obtained and analyzed before the end of the academic year. Teachers should be informed of assessment results and receive specific recommendations for professional development. Feedback from students should be anonymous and constructive to help improve the educational process. Regularity of evaluation and predetermined criteria promote trust among faculty and students.

The limitations of the study primarily stem from its theoretical nature and reliance on secondary data obtained from existing academic literature, without the inclusion of primary empirical research. Although the study offers a comprehensive synthesis of current evaluation models and proposes a theoretically grounded framework, it lacks validation through practical implementation in real educational settings. As a result, the generalizability of the proposed model remains unverified, and its applicability across diverse institutional and regional contexts cannot be assumed. Additionally, the absence of stakeholder perspectives such as those of faculty, administrators, and students limits the ability to fully assess the practical feasibility and perceived fairness of the model. These limitations underline the need for future empirical research involving pilot testing in one or more higher education institutions, using defined participant samples and context-sensitive evaluation, to ensure the model's reliability, usability, and effectiveness in enhancing academic quality.

To integrate the proposed evaluation model into national quality assurance frameworks, policymakers should focus on developing standardized guidelines that ensure consistency in assessment criteria and processes across institutions. It is crucial to involve faculty, administrators, and students in the adaptation process, ensuring the model aligns with national educational goals and addresses institutional needs. Supporting institutions with the necessary technology, such as LMS and AI-based platforms, will facilitate data collection and improve the accuracy of evaluations. Training programs for administrators and faculty are essential to ensure proper use and integration of the model into existing quality assurance practices. Establishing a continuous feedback loop will allow for ongoing monitoring and adjustments, ensuring the model remains relevant and adaptable to evolving educational standards.

To enhance the model's adaptability, cross-cultural validation should be considered to ensure its relevance across diverse educational contexts. This involves testing the model in various cultural settings to identify potential variations in teaching practices, assessment expectations, and institutional norms. By incorporating feedback from different regions or countries, the model can be refined to accommodate cultural differences in faculty evaluation. This cross-cultural approach will increase the model's global applicability, ensuring that it can be effectively integrated into diverse educational systems while maintaining its core principles of fairness, objectivity, and comprehensive assessment.

Future research may include a variety of regional or institutional samples to test and refine the proposed assessment system. This will allow for cultural, organizational, and educational differences that may affect the effectiveness of the assessment to be taken into account. Research in different regions or types of higher education institutions will provide broader data for adapting the system to the specifics of each institution, as well as improving the model, taking into account local needs and conditions.

References

Agarwal, N., Sangwan, M., & Agarwal, E. (2024). Revolutionizing pedagogy: Exploring AI coaching in enhancing teacher professionalism. In R. Doshi, M. Dadhich, S. Poddar, & K. Hiran (Eds.), *Integrating generative AI in education to achieve sustainable development goals* (pp. 264–281). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-2440-0.ch014

Altybaeva, M. A., Sooronbaeva, K. A., Avazova, E. T., & Turganbaeva, R. Z. (2023). Formation of competencies for the sustainable development of future teachers of mathematics. In E. G. Popkova & B. S. Sergi (Eds.), *Current problems of the global environmental economy under the conditions of climate change and the perspectives of sustainable development* (pp. 397–403). Springer. https://doi.org/10.1007/978-3-031-19979-0_42

Bancroft, S. F., Bacon, H. R., Byfield, L. G., Colaninno, C. E., & Wonnacott-Stanley, E. J. (2024). "It changed my view of assessment": A framework for teacher-centered state standardized science assessment. *Teacher Development*, 1–18. https://doi.org/10.1080/13664530.2024.2382953

Bockrath, R., Rodriguez, G., O'Brien, C. L., & Dolan, B. M. (2024). Students as teachers: Development and implementation of a workplace-based assessment. *Medical Science Educator*, 34(3), 537–541. https://doi.org/10.1007/s40670-024-02022-y

Bracken, D. W., Rose, D. S., & Church, A. H. (2016). The evolution and devolution of 360° feedback. *Industrial and Organizational Psychology*, 9(4), 761–794. https://doi.org/10.1017/iop.2016.93

Cañadas, L. (2021). Contribution of formative assessment for developing teaching competences in teacher education. *European Journal of Teacher Education*, 46(3), 516–532. https://doi.org/10.1080/02619768.2021.1950684

Chattopadhay, T., & Jankunaite, R. (2023). Positioning teacher development for high performance through digital transformation and support systems in Kyrgyzstan. In W. O. Lee, P. Brown, A. L. Goodwin, & A. Green (Eds.), *International handbook on education development in the Asia-Pacific* (pp. 1995–2014). Springer. https://doi.org/10.1007/978-981-19-6887-7_112

Chavez, J. C. (2025). Enhancing Flipped Classrooms with Technology-Enhanced Assessments. *International Journal of Educational Reform*. https://doi.org/10.1177/10567879251341856

Cheung, W. J., Bhanji, F., Gofton, W., Hall, A. K., Karpinski, J., Richardson, D., Frank, J. R., & Dudek, N. (2024). Design and implementation of a National Program of Assessment Model – Integrating Entrustable Professional activity assessments in Canadian specialist postgraduate medical education. *Perspectives on Medical Education*, 13(1), 44–55. https://doi.org/10.5334/pme.956

Combéfis, S. (2023). Using continuous competency-based assessment as a success support service in higher education. In *2023 IEEE Frontiers in Education Conference (FIE)* (pp. 185–188). IEEE. https://doi.org/10.1109/fie58773.2023.10343034

Dmitrenko, N., Khrystych, N., Prokopchuk, N., Kalinina, L., & Bodyk, O. (2025). Cultivating intercultural competency: The role of sustainability in pre-service teacher professional development. *Scientia et Societus*, 4(1), 39–49. https://doi.org/10.69587/ss/1.2025.39

Dudar, V., & Kotsur, V. (2024). Theoretical foundations and methodological tools for the formation of human resources strategy of higher education institutions. *Professional Education: Methodology, Theory and Technologies,* 10(2), 78–89. https://doi.org/10.69587/pemtt/2.2024.78

Dudar, V., Riznyk, V., Kotsur, V., & Nosachenko, V. (2025). Internet platforms in an open educational environment in the organisation of students' independent work. *Humanities Studios: Pedagogy, Psychology, Philosophy*, 13(1), 9–23. https://doi.org/10.31548/hspedagog/1.2025.09

Dudarev, I., & Purtov, V. (2024). System of comprehensive evaluation of academic staff activity. *Scientific Bulletin of Mukachevo State University. Series "Pedagogy and Psychology",* 10(4), 24–40. https://doi.org/10.52534/msu-pp4.2024.24

Dudko, S. (2024). Modeling of the educational environment in the teacher's professional and pedagogical activity. *Ukrainian Professional Education*, 8(1), 93–100.

Esengulova, M., Asekova, Z., & Toktogulova, N. (2024). Experience of applying the blended learning model in the system of professional development of primary school teachers in the Kyrgyz Republic. *Journal of Educational Technology Development and Exchange*, 17(1), 205–221. https://doi.org/10.18785/jetde.1701.12

Esteve-Mon, F. M., Llopis-Nebot, M. Á ., Viñoles-Cosentino, V., & Adell-Segura, J. (2022). Digital teaching competence of university teachers: Levels and teaching typologies. *International Journal of Emerging Technologies in Learning (iJET)*, 17(13), 200–216. https://doi.org/10.3991/ijet.v17i13.24345

Farihin, F., Suteja, S., Muslihudin, M., Aris, A., Haqq, A. A., & Winarso, W. (2022). A skill application model to improve teacher competence and professionalism. *International Journal of Educational Methodology*, 8(2), 331–346. https://doi.org/10.12973/ijem.8.2.331

Fernández-Cruz, F. J., & Rodr íguez-Legendre, F. (2021). The innovation competence profile of teachers in higher education institutions. *Innovations in Education and Teaching International*, 59(6), 634–645. https://doi.org/10.1080/14703297.2021.1905031

Furman, C. (2022). "How I became a better teacher": Expanding assessment practices rooted in ethical ideals. *New Educator*, 18(4), 306–324. https://doi.org/10.1080/1547688x.2022.2126053

Gamble, J., & Hewlett, L. (2023). In search of teacher professionalism: TVET teachers' "dual narrative" of professionalism. *Journal of Education*, 89, 122–145. https://doi.org/10.17159/2520-9868/i89a07

García, E. C., & Molins, L. L. (2022). Competence-based assessment in higher education during COVID-19 lockdown: The demise of sustainability competence. *Sustainability*, 14(15), 9560. https://doi.org/10.3390/su14159560

González-Fernández, R., Ruiz-Cabezas, A., Domínguez, M. C. M., Subía-Álava, A. B., & Salazar, J. L. D. (2023). Teachers' teaching and professional competences assessment. *Evaluation and Program Planning*, 103, 102396. https://doi.org/10.1016/j.evalprogplan.2023.102396

Gumanová, N., & Šukolová, D. (2022). Competences of university teachers: Systematic literature review. *Journal of Educational and Social Research*, 12(2), 15. https://doi.org/10.36941/jesr-2022-0031

Hilden, R., Oscarson, A. D., Yildirim, A., & Fröjdendahl, B. (2022). Swedish and Finnish pre-service teachers' perceptions of summative assessment practices. *Languages*, 7(1), 10. https://doi.org/10.3390/languages7010010

Kolesnyk , O., Lavrynenko , S., & Taranenko , K. (2023). Theoretical concepts of methodological innovations in the institution of higher education. *Pedagogical Sciences*, 6(1), 60–65. https://doi.org/10.33989/2524-2474.2023.81.289373

Kovtun, O., Kovtun, O., & Krykun, V. (2024). Effectiveness of international exchange programmes in vocational education. *Professional Education: Methodology, Theory and Technologies*, 10(2), 66–77. https://doi.org/10.69587/pemtt/2.2024.66

Kozhevnikova, A., & Kozhevnykov, P. (2024). Specifics of innovative educational environment and its influence on the development of future teachers' innovative competence. *Scientific Bulletin of Mukachevo State University. Series "Pedagogy and Psychology",* 10(2), 72–80. https://doi.org/10.52534/msu-pp2.2024.72

Latuapo, R. (2023). Module-based training for teacher professional development in Madrasah. *Deleted Journal*, 9(1), 67–78. https://doi.org/10.15575/jpi.v0i0.24934

Liu, L., Conner, J., & Li, Q. (2021). Cultivating teacher professionalism in Chinese and U.S. settings: Contexts, standards, and personhood. *Education Inquiry*, 14(1), 22–39. https://doi.org/10.1080/20004508.2021.1950274

Liu, S., Jin, L., & Zhu, H. (2024). Deep learning-based research on the comprehensive evaluation system for college faculty competence. In R. Kountchev (deceased), S. Patnaik, Y. Liu, & R. Kountcheva (Eds.), *Intelligent 3D Technologies and Augmented Reality. Proceedings of the Fifth International Conference on 3D Imaging Technologies – Multidimensional Signal Processing and Deep Learning, Volume 2* (pp. 245–254). Singapore: Springer. https://doi.org/10.1007/978-981-97-5184-6_21

Lyailya, I., Amangeldi, K., Lyailya, B., Seidaliyeva, G., Gulnar, A., & Erzhan, E. (2022). Enhancement of scientific research function of future teachers in modern education system. *Cypriot Journal of Educational Sciences*, 17(3), 741–751. https://doi.org/10.18844/cjes.v17i3.6936

Mardanov, M., Aliyev, E., Rzayev, R., & Abdullayev, K. (2023). Formation of the academic index of a university teacher based on weighted evaluation criteria. In C. Kahraman, I. U. Sari, B. Oztaysi, S. Cebi, S. C. Onar, & A. Ç. Tolga (Eds.), *Intelligent and Fuzzy Systems. Intelligence and Sustainable Future. Proceedings of the INFUS 2023 Conference, Volume 2* (pp. 600–608). Cham: Springer. https://doi.org/10.1007/978-3-031-39777-6_70

Martínez, A. I. M., Torres, C. I., Romero-García, C., & Del Rocío Carranza Alcántar, M. (2022). Assessment of university professor competencies: A comparative perspective of Mexico and Spain. *Bordón Journal of Pedagogy*, 74(1), 105–121. https://doi.org/10.13042/bordon.2022.89958

Mascadri, J., Spina, N., Spooner-Lane, R., & Briant, E. (2022). Assessors' perspectives of an oral assessment within a teaching performance assessment. *Assessment & Evaluation in Higher Education*, 48(5), 613–626. https://doi.org/10.1080/02602938.2022.2122930

Moorhouse, B. L., & Kohnke, L. (2022). Conducting formative assessment during synchronous online lessons: University teachers' challenges and pedagogical strategies. *Pedagogies: An International Journal*, 18(3), 431–449. https://doi.org/10.1080/1554480x.2022.2065993

Mukanov, A., Saduov, A., Akbayev, Y., Dulatbekova, Z., Ospanova, A., Selezneva, I., Madiyarova, E., & Jempeissova, G. (2018). Composing of scenarios development in strategic planning. *Journal of Environmental Management and Tourism*, 9(3), 491–500. https://doi.org/10.14505/jemt.v9.3(27).09

Onyshchenko, N., & Serdiuk, N. (2025). Peculiarities of training future specialists in higher education institutions using innovative teaching technologies. *Scientia et Societus*, 4(1), 86–95. https://doi.org/10.69587/ss/1.2025.86

Pastore, S., & Mincu, M. (2024). A feasible balance? The Italian teachers' standpoint on assessment literacy, assessment practice, and teacher professional development. *European Journal of Teacher Education*, 47(2), 226–245. https://doi.org/10.1080/02619768.2024.2338853

Petrenko, L., & Kokareva, A. (2023). Features of the stem-education formation: Foreign experience. *Pedagogical Sciences*, 6(1), 140–147. https://doi.org/10.33989/2524-2474.2023.81.289407

Pluzhnyk, O., Khmelnytska, O., Tkachenko, L., & Zlenko, Y. (2024). Social communications as a factor of diversification of flexible learning trajectories. *Society. Document. Communication*, 9(2), 62–71. https://doi.org/10.69587/sdc/2.2024.61

Porkodi, S. (2024). The effectiveness of agile leadership in practice: A comprehensive meta-analysis of empirical studies on organizational outcomes. *Journal of Entrepreneurship Management and Innovation*, 20(2), 117–138. https://doi.org/10.7341/20242026

Povidaichyk, O., & Bartosh, O. (2025). Enhancing Research Readiness in Social Work Education: An Experimental Approach and Assessment. *International Journal of Educational Reform*. https://doi.org/10.1177/10567879251345784

Rashid, A. S. K. (2022). The extent of the teacher academic development from the accreditation evaluation system perspective using machine learning. *Journal of Experimental & Theoretical Artificial Intelligence*, 35(4), 535–555. https://doi.org/10.1080/0952813x.2021.1960635

Rodríguez-Legendre, F., & Fernández-Cruz, F. J. (2024). The innovative competence of university teachers to improve learning: A comparative study between Bolivia, Spain and Mexico. *Research in Comparative and International Education*, 19(1), 91–111. https://doi.org/10.1177/17454999231219616

Samatova, E. E., Asanov, B. M., & Khasanova, D. I. (2023). Trends in the development of the State Educational Standard of Higher Professional Education of the Kyrgyz Republic. In E. G. Popkova, B. S. Sergi, & K. V. Vodenko (Eds.), *Social Mobility, Social Inequality, and the Role of Higher Education* (pp. 329–348). Leiden: Brill. https://doi.org/10.1163/9789004540019_026

Shuliuk, N. (2021). Experience of profile orientation on the basis of specialized online resources. *Scientific Studios on Social and Political Psychology*, 27(1), 252–259. https://doi.org/10.61727/sssppj/1.2021.252

Stepanenko, N. (2024). Management of pedagogical communication: Theoretical and applied aspects. *Ukrainian Professional Education*, 8(2), 79–93.
Sturgis, C., & Casey, K. (2018). *Quality principles for competency-based education*. Vienna, VA: iNACOL. https://aurora-institute.org/wp-content/uploads/Quality-Principles-Book.pdf

Taushanova, M., Yermukhanova, L., Tazhbenova, S., Aitmaganbet, P., Muratov, Y., Irmekbayev, R., Balday, I., & Abilkassym, D. (2024). Evaluating the Impact of Educational Interventions on Medication Adherence Among Glaucoma Patients in Kazakhstan: A Public Health Perspective. *Bangladesh Journal of Medical Science*, 23(3), 787–797. https://doi.org/10.3329/bjms.v23i3.75111

Tkachenko, T., Soloviova, T., & Tkachenko, O. (2022). Multimedia presentations and their use in the study of school history courses. *Society. Document. Communication*, 7(1), 139–157. https://doi.org/10.31470/2518-7600-2022-14-139-157

Vakulyk, I. (2025). Minimal effort: The key to effective learning and goal attainment. *Humanities Studios: Pedagogy, Psychology, Philosophy*, 13(1), 70–82. https://doi.org/10.31548/hspedagog/1.2025.70