

REPUBLIC OF AZERBAIJAN

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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

SYSTEM OF STUDENT ACHIEVEMENT ASSESSMENT IN HIGHER EDUCATION INSTITUTIONS

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THE MAIN CONTENT OF THE RESEARCH WORK

Relevance and level of development of the topic. Like in other areas, Azerbaijan required drastic changes to its educational system after gaining independence. The transition from the Soviet education system to a modern, world-class education system began in the mid-1990s. The first essential step taken in this direction was the introduction of a two-level higher education system, comprising bachelor's and master's degrees, in the country in 1993. That year, 23 higher education institutions in the country admitted students to the bachelor's level for the first time.

In the following years, significant transformations and innovations emerged in undergraduate education. The rules governing academic programs were refined to align with international standards and expectations. This period marked the beginning of the transition to a credit-based education system, facilitating a more flexible and comprehensive learning approach. In 1997, after the first cohort graduated with bachelor's degrees from higher education institutions, the focus shifted toward the second stage of higher education: the master's degree program. This pivotal change represented a commitment to enhancing educational quality and meeting the evolving demands of students and the global workforce.

Reforms in the education system, including those at the higher education level, have taken on a systematic nature since the "Program of Reforms in the Field of Education of the Republic of Azerbaijan" was approved in 1999. According to this program, the network of institutions was optimized, new specialties were added to the structure of specialist training, and structural changes were made to the higher education system as well as at other levels. Educational institutions were given significant independence and broad powers.

Issues like the establishment of scientific councils and state attestation commissions, their internal organization, the development of specialized curricula by state educational standards, and other matters were resolved independently by higher education institutions. In addition, 6 higher education institutions were given greater independence and established their activities on the principle of self-

government. These higher education institutions have been financed from a separate item from the state budget since 2001.

For this purpose, the president's decree dated June 13, 2000, "On the improvement of the education system in Azerbaijan," is one of the innovations in the field of higher education. It calls for the financing of the nation's four top universities – Baku State University, Azerbaijan State Oil Academy, Azerbaijan Medical University, and Azerbaijan Agricultural Academy – and the designation of certain universities as "universities."

Additionally, the expansion of international relations in the field of education and the development of higher education institutions in our republic have been made possible by the educational reforms that have been implemented.

To align its educational system with international norms, Azerbaijan has begun working actively with international organizations. The World Bank, the International Development Association, and the Azerbaijani government signed a loan agreement in 1998 to carry out educational reforms.

Higher education reforms are typically implemented in collaboration with European institutions, including the European Commission and the European Union. The reforms implemented in the field of higher education are particularly impacted by Azerbaijan's involvement in the Bologna process. In order to establish a single higher education region in Europe by 2005, our country joined the processes that started in 1999.

The necessity of higher education access in line with common European standards has been validated by Azerbaijan's involvement in the Bologna process. Azerbaijan has been implementing reforms in this regard since 2005. An Action Plan covering 2006-2010 was approved in order to put the Bologna Declaration's provisions into practice. The implementation of the state program, which was authorized by the President of the Republic of Azerbaijan on May 22, 2009, is a crucial step in the reform of higher education. The primary objectives of the "State Program on Reforms in the Higher Education System of the Republic of Azerbaijan in 2009-2013" are to integrate the nation's higher education into the European educational system,

establish its content according to the Bologna process's principles, guarantee its attractiveness and competitiveness, meet the country's economic development requirements for highly educated personnel, and develop human resources potential to meet the demands of the information society and knowledge-based economy. Additionally, the program aims to create an economically and socially efficient higher education system that gives the populace access to modern, high-quality education. To carry out the policy of extending educational reforms in Azerbaijan and bringing it into compliance with international standards, a new legislative foundation was also required.

For this reason, following lengthy public debates, the parliament adopted the Law of the Republic of Azerbaijan "On Education" in June 2009, and its implementation got underway.

The president of the nation is giving the education of young people overseas significant consideration in addition to the efforts being made to raise the standards of higher education in the nation. The Azerbaijani state has started funding young people's education at the top universities in the world as part of its strategy to turn oil capital into human capital. A distinct state program has been established specifically for this purpose.

Approved by the President of the Republic of Azerbaijan's decree dated April 16, 2007, the "State Program on Education of Azerbaijani Youth Abroad in 2007-2015" has the following primary objectives: to increase the number of Azerbaijani youth sent abroad to study at state expense to 1,000 per year in 2015, and to 5,000 per year from 2007 to 2015; to allocate funds for advanced training and retraining; to ensure specialist training based on intergovernmental agreements and international student exchange between higher education institutions, taking into account the republic's economic development priorities; and to divide the funds into bachelor's, master's, residency, and doctoral degrees.

The State Oil Fund provides funding for the program. The State Oil Fund provided 10 million manats a year for youth to study overseas at the state's expense after the program was approved. This sum was raised to 15 million manats for 2012. Young Azerbaijanian

people are sent to study in developed nations like Australia, South Korea, China, Malaysia, Singapore, the United States, Germany, France, the Netherlands, Norway, Sweden, Finland, Italy, Belgium, and Great Britain as part of this program.

Important elements of the president's plan to transform the oil capital through the development of intelligence, personnel training, and professionalism include the advancement of education in Azerbaijan, the provision of education to children and youth that meets international standards, and the training of highly qualified personnel. Strategic and long-term investments are made in education. These investments lay a crucial basis for Azerbaijan's long-term growth and will start to yield more obvious results in the ensuing decades.

On October 24, 2013, the President issued an edict approving the "State Strategy for the Development of Education in the Republic of Azerbaijan". This normative document outlines five strategic directions for large-scale measures.

The establishment of results-based, accountable, open, and effective management systems in education is the third strategic direction. A result-oriented, transparent management model in educational institutions, new information reporting systems for quality assurance, and management of education are all part of the aforementioned direction, which also includes modernizing regulations and management in the educational system based on cutting-edge international experience.

Management is listed as one of the primary priority directions in the "State Strategy for the Development of Education in the Republic of Azerbaijan." One of the most effective management techniques in the field of education is democratic management.

The Law of the Republic of Azerbaijan "On Education" prepared the "Model Charter of a Higher Education Institution," which was approved by Resolution No. 9 of the Cabinet of Ministers of the Republic of Azerbaijan on January 21, 2011, and governs management in higher education institutions. The foundation for guaranteeing the growth of human capital in any nation is the efficient operation of the higher education system, which is also crucial to the formation of civil

society and the socioeconomic advancement of the nation. The Decree of the President of the Republic of Azerbaijan dated February 2, 2021, approved "Azerbaijan 2030: National Priorities for Socio-Economic Development" with special attention to the development of competitive human capital and a modern innovative space in our nation.

The higher education system is a mechanism that produces leading scientific research and innovations. Science and innovations are closely related to the development of the human factor, its self-expression, and its acceptance in society. The human factor develops human resources as an economic resource and turns them into the human capital of the country, including its national wealth.

The object of the research is the process of assessing student achievement.

The subject of the research is the main features of assessing students' achievements.

The goals and objectives of the research are to approach the process of assessing student achievement in higher education institutions from a modern perspective, to explore innovative approaches in this area, and to evaluate both the positive and negative aspects of the existing assessment system.

The objectives of the research are as follows:

- to examine the legal and normative documents that constitute the foundation for assessing student achievements in our education system.

- to identify approaches to the assessment of student achievements that are informed by existing progressive theories in the field of pedagogy.

- to clarify the essence of new trends, such as competence and learning outcomes introduced by the Bologna process, about the assessment of student achievements.

- to explore the multi-point system and its significance in the assessment process of student achievements.

The methodological basis of the research is comprised of legal and normative documents related to student assessment within our education system, the theory of scientific cognition, and

innovative elements from existing educational theories. Additionally, it includes a comprehensive collection of various pedagogical events and facts.

During the research, the following research methods were employed: books, research works, legal documents, and scientific articles pertaining to the issue were examined and analyzed, and conclusions were made.

Method of observation. Higher education institutions' procedures for evaluating student performance were watched, and the information gathered was examined. Additionally, techniques like composition, analysis, deduction, and induction were applied.

The defense's proposed provisions are as follows:

The core of student accomplishments in the present era is pertinent to the primary competencies of lifelong learning;

- only a multi-point system is used to reflect the proportion of both current grades and end-of-semester exam results in the evaluation of student accomplishments;

The purpose of the National Qualifications Framework document is to guarantee a certain level of transparency in the evaluation of student accomplishments;

One of the requirements for carrying out an exhaustive and impartial evaluation of student learning outcomes is the use of creative approaches;

Cooperation between students and teachers during evaluation should support the growth of students' self-assessment abilities.

Scientific novelty of the research. The subject of the study is regarded as one of the contemporary issues. Competency, learning outcomes, the National Qualifications Framework, and other progressive trends in our educational system were taken into consideration when approaching the problem from a purely modern perspective.

The theoretical and practical implications of the research. The theoretical implications of the research the concepts proposed as a result of the topic's research, the generalized provisions of their essence, can be useful in educational literature. The interpretations

provided to the core of the research work's student accomplishments are regarded as a topic of current relevance.

Practical significance of the research. The pedagogical process and textbooks written in this field can benefit from the new concepts and provisions that the research has revealed.

The approbation of the research. 5 articles (including 1 article abroad) and 3 conference materials (including 1 conference material abroad) related to the content, main scientific ideas and results of the dissertation have been published.

Name of the organization where the research was conducted. The research was conducted at the Department of Education of Khazar University.

Total volume of the dissertation in characters, indicating the volume of the structural sections of the dissertation separately. The dissertation consists of an introduction, 12 paragraphs, a conclusion and a list of used literature. The introductory part of the dissertation – 13 pages, 17417 characters, Chapter I – 51 pages, 99959 characters, Chapter II – 72 pages, 119535 characters, a conclusion – 5 pages, 8925 characters. The total volume of the dissertation excluding the list of used literature is 245836 characters.

GENERAL CHARACTERISTICS OF RESEARCH

Scientific novelty and theoretical and practical significance are reflected in the introduction, which also substantiates the problem's relevance, the level of development, the object, subject, goals, and objectives of the research, the research methods, and the main defense provisions.

Three paragraphs make up Chapter I of the study, which is titled **"Theoretical Foundations of the Assessment of Student Achievements in Higher Education Institutions."** *Normative and Legal Basis for the Assessment of Student Achievements in Higher Education Institutions* is the title of paragraph 1 about the educational reform in Azerbaijan. This paragraph discusses the reforms implemented in the assessment field as well as other educational domains.

It became essential to develop an assessment system that satisfies the demands of the modern era and curricula following the development and implementation of curricula that incorporate new educational content. On January 13, 2009, the document *"Assessment Concept in the General Education System of the Republic of Azerbaijan"* was approved, marking the start of the first initiative in this field. All things considered, this idea is the first comprehensive, impartial, trustworthy, and understandable document outlining the procedure for evaluating students' performance in our nation's educational institutions.

Evaluation is the process of describing and assessing an item or procedure according to its worth, quality, and level. To put it another way, evaluation is the process of figuring out and quantifying the degree of quality and level of an item or procedure. It is not advisable to measure objects and processes using the same criteria because their quality indicators differ. It is essential to measure and assess them based on the indicators and criteria unique to each of them. The same is true for training: it is critical to identify quality indicators that are specific to the field, process, and disciplines being assessed and to accurately measure and assess those indicators' degree and level.

The second paragraph, *"Assessment of student achievement as the main competencies of lifelong learning,"* explores the novel developments in this field as well as the new strategy for evaluating student achievement in the twenty-first century.

The following categories apply to innovative changes in the assessment field:

- Written assessments and coursework
- Assessments conducted by teachers - student evaluation of themselves;
- Assessment criteria that are both explicit and hidden;
- Cooperative and competitive;
- Evaluation of the process and the results;
- Learning outcomes and learning objectives;
- Competencies - content;
- Assessment of the course and modules.

One of the most pressing issues of our day is the development of competency-based educational programs in both the global education arena and the European higher education sector. The need to develop a capable personality that can satisfy the demands of the knowledge economy is the primary cause of this. Even though it can be challenging to conclude from the information gathered, the teacher must explain how much the student's performance satisfies the established standards. The instructor should also explain to the student his areas of strength and weakness in terms of applying his knowledge, abilities, values, and attitudes in pertinent contexts. As a recent development in the field of education, the creation and use of competencies and assessments based on them is a topic of much debate.

"The scientific and pedagogical literary formulation of the problem" is the third paragraph of the topic of Chapter I. It is demonstrated that notable educators, psychologists, and methodologists have been interested in the issue of assessment in education since antiquity. In his work "Great Didactics," published in 1635, renowned Czech educator Y.A. Comenius offered insightful and practical ideas regarding a wide range of topics related to the educational process, including the means, regulations, and verification and assessment of learning outcomes.

In addition to having a strong appreciation for the role that assessment plays in education, K.D. Ushinsky also harshly criticized the survey and assessment practices of his day. The great educator observed that the current methods and regulations hindered students' ability to think critically and stifled their strength, which prevented them from demonstrating interest and initiative.

Numerous scientists, methodologists, and actual school employees have been researching the assessment issue in the former USSR, including Azerbaijan, from pedagogical-psychological and methodological perspectives since the middle of the 20th century. Three categories can be used to organize the research on the problem's general and particular issues:

- creation of the broad theoretical underpinnings of training assessment and testing;

- examination of problems with the conventional evaluation system and how to make it better;
- as a crucial component of monitoring, the shift to a new assessment system and its study are both included.

Our pedagogical scientists, academic M.M. Mehdizade, professors A.Y. Seyidov and M.A. Muradkhanov, provide excellent services in the first direction.

In Russia, more thorough research has been done in this area. V.A. Sukhomlinski, M.A. Danilov, B.P. Yesipov, Y.K. Babanski, E.Y. Golant, I.Y. Lerner, M.N. Shkatkin, and other scientists who worked on pedagogical and didactic problems offered insightful suggestions and ideas on the theoretical and scientific problems of assessment, researched advanced pedagogical experience in this field, and made generalizations. V.A. Sukhomlinski's contribution to the problem-solving process is particularly noteworthy. He highlighted the pedagogical, psychological, social, and ethical purposes of assessment, demonstrating that the grade reflects the teacher's attitude toward the student as a whole rather than just their level of knowledge.

The textbook *"Higher School Didactics"* by Associate Professor B. Bashirov conveys his perspective on certain approaches while reflecting conventional assessment tools, indicators, and procedures.

Along with educators, methodologists, psychologists, and representatives of other scientific disciplines have taken an interest in the assessment problem. Prof. Y.Sh. Karimov has long been involved in the study and generalization of educational issues, particularly those about elementary education. He has also carried out research in the area of assessment and provided helpful advice to educators. In the book *"Norms for Assessing Students' Learning Success with a 9-Point System,"* which he edited, the fundamentals of the 9-point assessment scale, how it differs from the 5-point scale, indicators, and other problems were examined; the circumstances surrounding its use were taken into account; and the experiment's outcomes were presented.

In his article *"Philosophy of Knowledge Assessment,"* Prof. Sh.Askerov points out that a more accurate assessment scale is

required and that assessments are crucial for managing education as well as for revealing a student's knowledge.

The author highlights the importance of altering the assessment system and criteria and talks about the need for a new assessment scale, particularly the use of the test method in inspections and exams and the drawbacks related to it.¹

"Opportunities and ways of using innovative approaches in assessing student achievement in higher education institutions" is the topic of Chapter II of the dissertation. There are three paragraphs in this chapter as well.

"Application of innovative methods for conducting a comprehensive and objective assessment of student achievement" is the title of the first paragraph in the chapter. Thus, the way the educational process, programs, and techniques are organized directly incorporates innovations in education. It is highlights that pedagogical activity, the funding structure, and the evaluation of educational quality can all be impacted by changes, and in today's society, education is crucial. It is noted that to find promising directions for its development, assessment is the next step.

It is precisely this kind of innovative activity that not only makes the business more competitive in the educational services market but also establishes the course of the teacher's professional growth and creative pursuits and truly contributes to the students' personal growth. As a result, teachers' and students' scientific and methodological endeavors are closely intertwined with innovative activity.

Innovative teaching strategies are those that draw on the most recent scientific and information technology advancements. By fostering students' creativity and independence, they hope to raise the standard of education (problem-based learning approaches, research methodologies, and educational models that guarantee students' independence and creative potential are realized).

The use of cutting-edge technologies in the educational process is becoming increasingly necessary given the state of modern society.

¹ Regulations on the multi-point system of assessing students' knowledge // – Baku: Azerbaijan School, – 1999. No. 8, – pp. 3-8

Understanding the key characteristics of the current pedagogical technologies is essential to selecting those that enable the achievement of the best possible teaching and parenting outcomes.

In their works, Azerbaijani authors have extensively discussed foreign authors, portfolio technology, and innovative pedagogical technologies.

The portfolio is one of the evaluation techniques currently employed in the field of education. One of the newest and most cutting-edge technologies, particularly in assessment, is the portfolio. Its primary objective is to teach students how to organize their activities, how to be motivated to engage in active cognitive activity, how to develop reflective skills, and how to properly evaluate their work.

Typically, a portfolio is used in conjunction with more conventional control and evaluation instruments to verify the reproductive level of data. The portfolio is a crucial component of an activity-based, practice-oriented approach to education since it enables you to consider the outcomes attained by the student in a variety of activities.

Students develop the following competencies while working on a portfolio: the need for active cognitive activity and the readiness for ongoing self-improvement.

Many educators and psychologists have concluded that a portfolio is a personal folder that shows the dynamics of an individual's accomplishments in an activity, a way to compile individual work results over a specific period of time, and a means of self-evaluation.

Today, in the context of the introduction of a new generation of electronic portfolios, a student's electronic portfolio acts as a modern and innovative assessment tool in the process of training future specialists.

"Diagnostic and correction work in the educational process as important elements of the monitoring and evaluation system" is the title of paragraph two in Chapter II. This passage demonstrates how diagnostic and remedial work, as crucial elements of the

monitoring and assessment system, contribute significantly to raising the effectiveness and caliber of instruction in higher education.

The level and development dynamics of the educational process cannot be accurately and completely revealed, nor can it be managed without diagnostics and correction.

Prof. A.A. Alizade had written: *“The psychological and pedagogical diagnostics of the personality: its interests, abilities, self-concept, character traits, and features of cognitive activity should be systematically studied.”* It is necessary to forecast the development of personality².

Diagnostics can be used in a variety of ways to enhance a particular process or area after it has been studied. It is widely used in medicine and psychology, and there is a growing effort to find the best diagnostic techniques for resolving specific issues. The diagnosis of students' intellectual development and the choice of its methodologies represent a significant area of psychological research.

According to research on new pedagogical thinking, treating students as unique individuals, establishing the pedagogical and psychological conditions required for their growth, and conducting personality tests are all deemed necessary prerequisites for instruction and training.

It is believed that to properly organize diagnostics, it is necessary to first think about and clarify pedagogical diagnostics, including its essence, goals, and objectives. Because it can only be studied and applied effectively with such a conceptual approach.

Although the definitions taken into consideration in the diagnostics pedagogical literature highlight the concept's key ideas, they fall short of capturing its essence. The primary purpose of diagnostics is to analyze the situation and results to identify and assess the observed flaws and shortcomings as well as the reasons behind them. Diagnostics is not just about studying the situation and revealing the results.

According to this perspective, the core of pedagogical diagnostics is as follows: A management function known as

² Alizade, A.A., Sultanova, I.N. Taxonomy theory and practice: the bright path of the modern school / A.A.Alizade, I.N.Sultanova. – Baku: ADPU, – 2008. – 172 p.

pedagogical diagnostics seeks to identify, examine, and assess the circumstances surrounding the educational process, its outcomes, the strategies and tactics used to attain these outcomes, the observed flaws and deficiencies, and the reasons behind them. Its ultimate objective is to rectify the identified flaws and deficiencies in order to guarantee the forecasting, efficient development, and administration of the educational process as well as the students' educational activities.

Like control, diagnostics are closely related to assessment and are always present because they give the teacher precise information about the student's knowledge and skill level and allow him to evaluate his knowledge objectively. All phases of training, testing, and evaluation involve some degree of diagnostics. First, let us look at this as a table:

Table 2.2.1

Objectives of diagnostics on the stages of inspection and assessment

Inspection and evaluation steps	The goals of diagnostics on steps
Initial inspection	To initially reveal the level of knowledge on a certain subject (section, topic).
Current inspection	To determine the level of mastery of individual elements of the educational program
Repeat inspection	Partially reveal the degree of mastery of knowledge and skills on the topics covered.
Periodic inspection	To determine the quality of assimilation of the interrelationships between the structural elements of the materials studied on certain sections or major topics of the subject.
Final inspection	To reveal the actual level of learning and the quality of knowledge of the students at the end of the training.
Complex nspection	To reveal the quality of implementation of interdisciplinary relations.

Diagnostics is an essential component of the educational process and has a major influence on it, as the table illustrates.

Both the efficient structure of the learning process and its outcomes – the revelation and advancement of students' knowledge and skill levels – should be the focus of diagnostic and remedial work. The development of these skills, which are crucial for the quality of education, ought to be a deliberate and methodical part of the monitoring and evaluation system in higher education rather than happening by accident. The first courses of all university faculties must include special courses and seminars on subjects like "Introduction to the Specialty," "Scientific Organization of Educational Work," "Formation of Mental and Practical Independent Work Skills in Students," and so forth. In order to guarantee that students receive a top-notch education, develop into experts with extensive knowledge and strong intellectual faculties, and are ready for creative endeavors, this is extremely important.

As the title implies, the impact of the monitoring and evaluation system on education quality is discussed in paragraph 3, ***The impact of the monitoring and evaluation system on improving the quality of education in higher education institutions (experimental work and its results).***"

This requirement highlights the significance of improving the teaching profession's reputation, reorganizing the education management system, and investing in human resources in this field.

This need gave rise to the concept of monitoring, which aids in the establishment and growth of the information society.

The Program for International Student Assessment (PISA), which now spans more than 70 countries, is a significant global system. International monitoring aids in exposing the condition of each nation's educational system and evaluating the success of strategic choices made in the field of education. A mechanism for the regular and systematic gathering, processing, and application of the most crucial data on significant facets of education at all levels – international, national, regional, and local (including educational institutions) – is quality monitoring of education.

Important components of monitoring are the distinct functions of educational process management (supervision, inspection, diagnostics, evaluation, correction, etc.), which also establish the framework for its execution. To put it another way, monitoring is done by the coordination of its components rather than by one person acting alone.

Control, examination, and evaluation provide the first information: learners' knowledge and skill levels are disclosed, and diagnostics are used to look into any errors or shortcomings that may exist and their causes. As a result, deviations from the established objective, norms, and standards are recognized, and the necessary remedial action is taken to modify the knowledge goal and the methods for reaching it.

Experience has shown that a biased, inaccurate perspective of correction work is linked to numerous flaws and mistakes in the administration of traditional education. In this situation, the primary focus is typically on exposing errors in learners' knowledge and abilities, while the inadequacies in the training's objectives and content, its means and methods, and its overall process go unnoticed.

Along with their conventional roles, control, evaluation, and other components of the monitoring system also serve the new purpose of overseeing the overall quality of the training process and its outcomes.

As a result, in monitoring, every aspect of the conventional learning process is focused on the task of controlling the caliber of the learning process and its outcomes. One way that monitoring appears is as a management procedure.

In the pedagogical process, the objects of monitoring can differ to varying degrees. Pedagogical monitoring is a type of management that involves gathering, evaluating, and disseminating the data required to assess the current state of the educational system, identify any permitted flaws or deficiencies, and determine the reasons behind them. It also enables you to forecast how the system will evolve.

A type of management known as "pedagogical monitoring" involves gathering, evaluating, and disseminating the data required to

assess the current state of the educational system, identify any permitted flaws or deficiencies, as well as the reasons behind them, and forecast how the system will evolve.

The existing literature on the principles of monitoring as a management element takes a variety of approaches. Some limit it to four principles, while others identify the principles of monitoring with functions³. There are additional training monitoring principles⁴. The principles of purposefulness, systematicity, objectivity, periodicity, efficiency (effectiveness), integrity, and transparency served as our guiding principles when conducting our experiments.

The complex implementation of the discussed principles ensures the effectiveness of monitoring. We have examined monitoring from the standpoint of a management paradigm in our research.

Since it "allows us to regularly monitor the development of the education system, and on the other hand, it actively influences its quality, increases the responsibility for self-improvement of all participants in the pedagogical process, and stimulates pedagogical creativity," the researchers emphasized the significance of analyzing and evaluating monitoring results from two perspectives.

The established indicators for class organization and teacher professional ability evaluation served as the foundation for the experimental work we carried out at Azerbaijan State Pedagogical University (ASPU). Additionally, the ASPU Pedagogy Department reviewed and approved the experimental work program we created in the monitoring and evaluation domain.

The experimental work, which was based on enhancing the quality of education and guaranteeing its efficient management, used data gathered during the monitoring of the educational process to study the challenges seen in students' mastery of subjects in various fields of activity and teachers' pedagogical activities, as well as their causes. Appropriate preventive and prognostic measures were taken to eliminate them.

³ Modern era and education. Materials of the IX Republican scientific-practical conference // – Baku: Baku University, – 2017. – 348 p.

⁴ Pedagogical Encyclopedia / – Moscow: Sov. Encyclopedia, – 1965. – 912 p.

About the study, the following **conclusions** were drawn:

1. Training assessment is a method of exposing students' knowledge and abilities, a crucial determinant of training quality, a prerequisite for its advancement and administration, and a methodical procedure that offers frequent stimulation and feedback. It engages with every aspect of the training process; certain components (control, verification, diagnostics, and analysis) contribute to the foundation for conducting objective evaluation; give it the data it needs. These factors are then impacted by assessment, which permits information clarification while also enabling the determination of other elements, such as forecasting and correction work. An essential component of monitoring, which is the primary task of controlling the quality of education, is the new assessment system. It is simply impossible to raise the standard of education without it.

2. The necessity of removing issues and flaws originating from the conventional assessment mechanism made the transition to a new system of assessment crucial. Some examples of these issues include the assessment's lack of adherence to exact standards and criteria, subjectivity, instances of abuse, consistency in the tools and procedures used, etc. The assessment mechanism has developed certain characteristic flaws as a result of the long-term failure to address these issues (reading for grades, memorization, apathy towards learning, dissatisfaction with grades, etc.).

3. The study shows that educational practice has not yet fully eradicated the flaws in traditional assessment. Subjectivity in assessment (artificially raising or lowering grades based on empathy, attitude, and discipline); the propensity to assign average grades (avoiding high and low grades); the propensity to evaluate quantitatively without providing justification for grades; the creation of conditions that encourage mechanical learning; the disregard for the development of autonomous thinking and working skills, etc., are some of these drawbacks. Students become disengaged from learning, teacher-student relationships become strained, the teacher's reputation is damaged, and future teachers' moral-psychological and pedagogical-methodological preparation is compromised.

4. Compared to assessments that rely on mechanical memorization and memory, the new assessment system enables us to improve education quality, eliminate the drawbacks of traditional assessment, update assessment criteria and mechanisms, and ensure objective, fair, transparent, and reliable systematic conduct of assessment. It also creates favorable conditions for the development of logical and creative thinking. Higher education's multi-point assessment system provides a solid foundation for fulfilling the demands, objectives, and goals of assessment activities in the contemporary era. In contrast to traditional assessment, the new system enables us to evaluate students' knowledge and abilities not just twice a year but all year long, encouraging them to take greater responsibility for their education and to regularly improve.

5. The development and objective application of accurate, dependable, and differentiated assessment criteria in a variety of fields of activity and disciplines, the proper adherence to the assessment principles (purposefulness, objectivity, fairness, scientificity, transparency, systematicity, and benevolence), and the integrated consideration of quantitative and qualitative indicators of knowledge and skills are all critical to the effectiveness of the assessment system in higher education and the caliber of students' learning outcomes.

6. According to the study, the existing 100-point assessment criteria are not very good at fully and completely putting the assessment principles into practice. Three indicators – completeness (volume) of knowledge, level of understanding, and accuracy – form the basis of the current assessment criteria, which are based on a 10-point scale. Only two cases (9 and 10 points) fully reflect these indicators, while other points only partially do so. The current evaluation criteria do not take into account the application of knowledge, which is one of the primary indicators. In addition to creating certain challenges in educational practice, such a situation makes it impossible to guarantee the standards of objectivity and accuracy of assessment. Nine primary and numerous derived indicators have been identified for the assessment of knowledge and skills in the current pedagogical and methodological literature. Of

course, it is challenging to appropriately consider so many indicators and provide an accurate, impartial assessment in real-world educational practice. The study demonstrates that all assessment indicators can be grouped into five categories and used as a basis for accurate assessment. These indicators include knowledge comprehension, application, and expression in accordance with specific rules, as well as accuracy (correctness) and completeness (volume).

7. The effectiveness of the assessment system largely depends on the selection and comprehensive application of the right measurement tools, ensuring the optimal integration of traditional and new (innovative) methods and tools. Traditional assessment tools - surveys, tests, and exams - do not allow for a comprehensive, accurate, and objective assessment of students' learning achievements and are mainly focused on the qualitative dimensions of the grade. The new assessment system requires new tools and methods in accordance with new requirements and principles. Research-tested ratings, portfolios, applied, situational, logical, and creative tests, knowledge competitions, pedagogical tasks and exercises, problem questions, dialogues and discussions, active (interactive) methods, and different kinds of exercises are examples of such tools. According to the study, new (innovative) techniques and resources not only offer a precise, thorough, and comprehensive evaluation of knowledge and skills in terms of quantity and quality, but they also aid in promoting students' learning activities, boosting their interest in the subject and specialty, fostering their mental and practical independence, and raising the standard of education.

8. Control, assessment, and evaluation are evolving in the context of the contemporary assessment system. This can be seen in the following ways: a) students' final training results are evaluated concurrently with their achievement process; b) assessments based on passive surveys and checks are replaced by active assessments and checks based on students' mental independence, creative thinking, practical skills, and problem-solving abilities; and c) surveys of disparate knowledge and skills that are isolated from one

another are replaced by assessments and checks based on integrated knowledge and interdisciplinary connections.

9. The shift from static assessment, which seeks to determine and evaluate students' readiness solely at test time, to a new system – a monitoring and evaluation system – that aims to analyze and develop the dynamics of qualitative changes in education is a significant aspect of contemporary assessment. The management function of educational monitoring is demonstrated by the gathering, processing, and analysis of pertinent data; ongoing observation of the training and educational process; and the present condition, degree, and deficiencies of students' knowledge and abilities as well as their causes to detect, address, and forecast them. Supervision, verification, assessment, diagnostics, analysis, correction, forecasting, and decision-making are all included in this. With the aid of all the links in the educational process, monitoring's primary goal is to track educational progress and enhance its quality.

10. The best model and technology for the monitoring and evaluation system must be chosen and implemented correctly for it to be effective. In terms of the full and comprehensive implementation of the monitoring and evaluation system, the study demonstrated that the four-component model of monitoring – organizational, research, analysis, correction, and forecasting components is appropriate. This model enhances the quality of the educational process by enabling the collection, processing, and efficient application of comprehensive data regarding its caliber.

Regarding the research, the following **recommendations** can be made:

1. Books and articles on assessment, as well as teaching aids, textbooks, and other materials that are a part of the new learning model, should be updated to reflect current needs;

2. One of the crucial elements of monitoring should be investigating the new assessment system;

3. It is important to establish favorable conditions for the portfolio's successful implementation;

4. Higher education's rating system should be a useful tool for impartially evaluating students' knowledge and abilities while also encouraging greater effort, engagement, and accountability for learning throughout the course of instruction;

5. Correctly and fully assessing the level and dynamics of the learning process should help improve the quality of education;

6. The experiences of countries around the world regarding assessment should be studied more thoroughly.

The following scientific works of the author on the topic of the dissertation have been published:

1. Formation of competency-based assessment. // – Baku: News of the Pedagogical University, Humanitarian, social and pedagogical sciences series, – 2023. No. 4(72), – pp. 182-188.
2. Organizational features of the effective functioning of the higher education system // – Baku: Baku Slavic University, Actual problems of studying the humanities, – 2023, No. 4, – pp. 382-384.
3. Assessment in education and its characteristics // – Baku: VI collection of scientific sources, theses, Scientific research, International scientific journal, – 2023. – pp. 50-52.
4. Characteristics of Student Achievement Assessment in Higher Education Institutions // Biltek – VIII International Symposium On Current Developments in Science, Technology and Social Sciences. – Paris: France, – October 24-26, – 2023, – pp. 106-107.
5. Application of innovative methods for comprehensive and objective assessment of student achievements // – Baku: Baku Slavic University, Actual problems of studying the humanities, – 2024. No. 1, – pp. 324-328
6. Application of a multi-point system in assessing students' knowledge in higher education institutions // – Baku: Scientific works of Baku Girls' University, – 2024. No. 1, – pp. 5-8
7. Assessment of student achievement as core competencies of education // – Ukrayna: Current issues of humanities: interuniversity collection of scientific works of young scientists

of Drohobych State Pedagogical University named after Ivan Franko, – 2024. No. 74, – pp. 353-356.

8. The role of the rating system in assessing students' knowledge and skills // Proceedings of the XVIII International Scientific Research Conference, – Baku: – 2024, – pp. 25-28.
9. Diagnostic and correctional work as key elements of the monitoring and evaluation system in the educational process // – Baku: Scientific Works of the Institute of Education of the Republic of Azerbaijan, – 2024. No. 5, – pp. 101–104.
10. The main characteristics of monitoring assessment type // Materials Book of the 3rd International Istanbul Scientific Research Congress, – Turkey: Istanbul, – October 1–3, – 2024, – pp. 1001–1005.
11. The role of the monitoring and evaluation system in higher education institutions in improving the quality of education // – Ganja: Scientific News Journal of Ganja State University, Series of Fundamental, Humanitarian and Natural Sciences, – 2024. No. 3, – pp. 157–160.
12. Basic Principles of Student Achievement Assessment in Higher Education Institutions // – Baku: Ancient Land. International Scientific Journal, – 2025. – pp. 112–114.
13. Methods and tools for assessing student achievements in higher education // – Russia: Advances in the Humanities, – 2025. No. 3, – pp. 154–158.



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