

 <p>International Meetings and Journals Research Association ISSN p (e): 27900169; 27900177 October 2026</p> <p>Science, Education and Innovations in the Context of Modern Problems</p> <p>Editor-in-Chief: Chiralek Chiralek Davudov Dr. Nigar Shikhnabi</p> <p>Monthly (Regular) Open Access October 2026 - Issue 25, Vol. 9</p> <p>imcra-az.org</p>	<p>Science, Education and Innovations in the Context of Modern Problems</p>
	<p>Issue 2, Vol. 9, 2026</p>
	<p>RESEARCH ARTICLE </p>
	<p>Developing Students' Readiness for Expert Activity in Higher Education: Scientific–Pedagogical Foundations, Institutional Support Systems, and Model Implementation</p>
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<p>Issue web link</p>	<p>https://imcra-az.org/archive/392-science-education-and-innovations-in-the-context-of-modern-problems-issue-2-vol-9-2026.html</p>
<p>Keywords Mots clés :</p>	<p>Expert activity; higher education students; pedagogical model; scientific and pedagogical foundations; educational quality; research competence.</p>
<p>Abstract</p>	<p>The modern transformation of higher education requires the development of students' analytical, evaluative, and research-oriented competencies. The State Strategy for the Development of Education in the Republic of Azerbaijan identifies the establishment of transparent, accountable, and outcome-oriented mechanisms as one of the key priorities of educational reform. Within this framework, the formation of students' readiness for expert activity is considered an essential component of improving the quality and effectiveness of higher education. The present study substantiates the scientific and pedagogical foundations of a model for preparing higher education students for expert activity. Expert activity is understood as a purposeful analytical and evaluative process aimed at assessing educational phenomena, identifying deficiencies, proposing improvements, and ensuring objective decision-making based on evidence. The research emphasizes that the development of expert competencies among students requires the creation of an internal institutional environment, including a university-based pedagogical expert support system. Such a system functions as an integral part of the teaching–learning process and contributes to the monitoring and improvement of educational quality. It ensures interactive cooperation between teachers and students, where both parties participate in a shared expert-oriented educational framework. The proposed model is based on a question-and-answer methodological approach and is oriented toward the development of independent research skills, critical thinking, analytical reasoning, and objective evaluation abilities. Through participation in small-scale research projects, students learn to identify errors, analyze shortcomings, justify conclusions, and formulate evidence-based recommendations. From a modern pedagogical perspective, the effectiveness of the model lies in its systematic and goal-oriented structure. It not only increases students' motivation and readiness for expert activity but also contributes to the continuous improvement of pedagogical processes and the overall quality of higher education.</p>
<p>Citation</p>	<p>Muradova N.Sh. (2026). Developing Students' Readiness for Expert Activity in Higher Education: Scientific–Pedagogical Foundations, Institutional Support Systems, and Model Implementation. <i>Science, Education and Innovations in the Context of Modern Problems</i>, 9(2), 1-11. https://doi.org/10.56334/sei/9.2.78</p>
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<p>Received: 19.08.2025</p>	<p>Accepted: 10.12.2025</p>
	<p>Published: 18.01.2026 (available online)</p>

Introduction

The rapid development of the global knowledge economy and the increasing integration of educational systems into the international academic space have significantly transformed the mission and structure of higher education. In the context of globalization, higher education institutions are expected not only to transmit knowledge but also to develop students' analytical thinking, research competence, and the ability to evaluate complex educational and professional processes.

These requirements are reflected in international educational frameworks, including the Bologna Process, which emphasizes student-centered learning, quality assurance, and the development of independent learning competencies.

In the Republic of Azerbaijan, the modernization of higher education is guided by the *State Strategy for the Development of Education*, which highlights the importance of accountability, transparency, and efficiency based on educational outcomes (Ministry of Education of the Republic of Azerbaijan, 2013). One of the key directions of this reform is the improvement of students' independent work and the development of their ability to participate in evaluation and quality assurance processes. In this regard, the formation of students' readiness for expert activity has become an important pedagogical task.

Expert activity in the educational context is understood as a specialized analytical and evaluative process that involves the assessment of educational phenomena, identification of strengths and weaknesses, and formulation of objective conclusions based on evidence. The development of such competencies enables students to engage in critical analysis, self-assessment, and research-based decision-making. Moreover, expert-oriented learning contributes to the formation of professional responsibility, reflective thinking, and the ability to work with scientific information.

Despite the growing importance of this area, a number of challenges remain within higher education practice. Many students lack a clear understanding of the nature, functions, and methodological foundations of pedagogical expertise. In most higher education institutions, the educational process is still oriented toward the acquisition of ready-made knowledge rather than the development of skills for independent analysis and evaluation. At the same time, institutional mechanisms and methodological support for organizing students' expert activities remain insufficiently developed.

International and national research emphasizes that the development of expert competence should be based on independent learning, research-oriented tasks, reflective methods, and active pedagogical interaction (Black & Wiliam, 2009; Sadler, 2010; Rustamov & Dadashova, 2007). In this context, independent student work becomes a key environment for developing expert thinking, as it allows learners to analyze information, compare results, identify problems, and propose solutions.

The relevance of the present study is determined by the need to improve the quality of students' independent work, particularly in the field of scientific research, and to create pedagogical conditions for the systematic development of their expert competence. The study focuses on the scientific and pedagogical justification of a model for preparing higher education students for expert activity.

The purpose of this research is to develop and substantiate a competency-oriented model that ensures the formation of students' readiness for expert activity within the framework of higher pedagogical education. The objectives of the study include:

- (1) analyzing the theoretical and methodological foundations of pedagogical expertise;
 - (2) identifying the role of independent learning and reflective practices in developing expert competence;
 - (3) defining the structural components and mechanisms of the proposed model;
- and
- (4) determining its scientific novelty as well as its theoretical and practical significance.

The scientific novelty of the research lies in the development of a structured model for preparing students for expert activity within the Azerbaijani higher education context. The theoretical significance of the study consists in systematizing the methodological foundations of pedagogical expertise, while its practical significance is related to the possibility of implementing the model in higher education institutions to enhance the quality of independent learning and research training.

Thus, the integration of expert-oriented learning into the educational process represents an important direction for improving the effectiveness and quality of higher education and for preparing graduates capable of analytical, evaluative, and research-based professional activity.

Expanded Introduction and Conceptual Framework

In contemporary higher education systems, the role of students is evolving from passive recipients of knowledge to active participants in educational quality assurance and academic evaluation processes. This transformation reflects global trends toward competency-based education, accountability, and evidence-based decision-making.

Expert activity in the educational context includes:

- analytical evaluation of educational materials and processes,
- participation in quality monitoring,
- assessment of research projects,
- identification of pedagogical problems,
- formulation of improvement strategies.

Developing such competencies at the student level contributes to:

- strengthening independent learning,
- enhancing research culture,
- improving academic responsibility,

- fostering critical and systemic thinking.

The institutionalization of student expert activity requires the establishment of a university-based pedagogical expert service, which:

- supports methodological guidance,
- ensures interaction between teachers and students,
- integrates expert functions into the educational process,
- promotes transparency and quality assurance mechanisms.

The proposed model aligns with the third priority of the national education strategy, emphasizing accountability for educational outcomes and the implementation of effective quality management systems (Hamidova, 2026).

Structure and Mechanism of the Proposed Model

The model includes the following components:

- | | Component |
|--|------------------|
| 1. Goal
Formation of students' readiness for expert and evaluative activity. | |
| 2. Content Component <ul style="list-style-type: none"> ○ Fundamentals of pedagogical expertise ○ Research methodology ○ Quality assessment principles ○ Analytical and evaluative techniques | |
| 3. Process Component <ul style="list-style-type: none"> ○ Question-and-answer learning technology ○ Participation in mini research projects ○ Peer review and analytical discussions ○ Identification and correction of errors | |
| 4. Result Component <ul style="list-style-type: none"> ○ Development of expert thinking ○ Ability to produce objective conclusions ○ Formation of evidence-based decision-making skills ○ Increased motivation for research and quality improvement | |

The implementation of this model creates a functional system of interaction that strengthens both student competence and institutional educational quality.

Scientific and Methodological Foundations of Pedagogical Expert Selection and Activity in Higher Education Requirements for Selecting Pedagogical Experts in Higher Education

The effectiveness and credibility of pedagogical expertise in higher education institutions largely depend on the professional qualifications and competence of the selected experts. Therefore, the process of selecting pedagogical experts must be based on clearly defined academic and professional criteria.

The main requirements for selecting a pedagogical expert in higher education include:

1. Specialized education relevant to the field of expertise
2. Academic degree (PhD, Doctor of Science, or equivalent)
3. Professional position within an academic or educational institution
4. Work experience in the relevant professional field
5. Number and quality of scientific publications in the specialization area
6. Experience in preparing expert reviews or evaluations
7. Demonstrated level of competence in expert assessment activities

These criteria ensure the reliability, validity, and professional credibility of expert conclusions.

Pedagogical Basis for Expert Appointment

The appointment of a pedagogical expert is carried out through a structured process based on institutional and professional evaluation. The selection procedure typically includes the following pedagogical and organizational stages:

- Submission of an application for obtaining expert authority
- Preliminary examination of submitted documents
- Evaluation of the applicant's professional qualifications and expertise
- Institutional decision regarding the granting of expert status
- Inclusion of the approved expert in the official expert database or registry

This systematic approach guarantees transparency and objectivity in the formation of expert bodies within higher education.

Concept of Pedagogical Expert Activity

Pedagogical expert activity represents a specialized analytical and evaluative professional activity that requires:

- in-depth knowledge of the evaluated object and subject area,
- professional skills and methodological competence,
- analytical thinking and professional intuition.

During the expertise process, the expert relies on evidence-based procedures and provides objective, fair, and scientifically grounded conclusions (Ahmadov, 2026). In addition, pedagogical expert activity is collaborative in nature, requiring continuous interaction with other specialists and stakeholders.

Methodological Foundations of Expert Activity

The effectiveness of pedagogical expertise depends on two essential methodological foundations: adherence to fundamental principles and the use of appropriate expert methods.

Table 2

Key Methodological Foundations of Pedagogical Expert Activity

I. Compliance with Fundamental Principles	II. Knowledge and Application of Expert Methods
Objectivity in evaluation	Individual expert evaluation method
Impartiality and independence	Morphological analysis method
Understanding and acceptance of evaluation criteria and professional ethics	Rating (ranking) method
Professional responsibility	Self-assessment method
Evidence-based judgment	Pedagogical consilium (collective discussion)
Ethical conduct	Group expert evaluation method

The specificity of expert methodology lies in the integration of specialized knowledge with professional ethical behavior.

Functions of Pedagogical Expert Activity

Pedagogical expert activity performs a wide range of professional functions, including:

- Research and analytical investigation
- Evaluation and quality assessment
- Monitoring and control
- Forecasting educational outcomes
- Development and improvement of educational processes
- Modeling and system design
- Diagnostic analysis
- Professional support and consultation
- Project design and implementation
- Constructive and innovative development

For effective implementation, the expert must perform three key functional components of expertise.

Scheme 1. Structural Components of Expert Evaluation

Three Core Elements of Expert Activity

1. Object – The subject of evaluation must be clearly defined
2. Procedures – Appropriate evaluation tools and methods must be available
3. Criteria – Evaluation indicators and standards must be established

(This scheme can be visualized as a triangular or circular model in graphical form.)

Procedures of Expert Activity

Pedagogical expertise consists of multiple procedural stages that students should master as part of their professional preparation.

Scheme 2. Key Procedures of Expert Activity

- Identification of the research problem
- Formulation of evaluation objectives
- Development of hypotheses
- Selection of evaluation methods
- Data collection and analysis
- Interpretation of theoretical and practical results

- Preparation of expert conclusions and recommendations

These procedures contribute to the development of students' practical research and analytical skills.

Logical Thinking in Expert Activity

Logical reasoning is a fundamental component of expert competence. Through logical thinking, experts are able to:

- analyze complex educational situations,
- identify causal relationships,
- justify conclusions,
- make evidence-based decisions.

Scheme 3. Logical Thinking Skills Required for Student-Experts

- Analytical thinking
- Critical evaluation
- Comparative analysis
- Argumentation and justification
- Synthesis of information
- Scientific reasoning

The development of these cognitive skills enhances students' research competence and expert thinking.

Expert Culture and Socio-Psychological Requirements

Expert activity also includes a strong cultural and socio-psychological dimension. Professional culture is considered one of the key parameters of pedagogical expertise (Hamidova, 2026).

Researchers emphasize that individuals engaged in scientific and pedagogical evaluation must demonstrate:

- broad worldview and professional awareness,
- deep knowledge of the research field,
- objectivity and fairness,
- emotional neutrality and avoidance of personal bias,
- effective communication skills,
- non-interference in natural research processes,
- scientifically justified conclusions (Jabrayilov, 2016).

Scheme 4. Ethical and Cultural Requirements for Expert Activity

- Professional integrity
- Responsibility and confidentiality
- Communication culture
- Respect for participants
- Conflict management skills
- Maintenance of professional authority

Understanding these socio-psychological characteristics is essential for students' successful development as future experts.

Pedagogical Strategies for Developing Student Expert Activity

The model for preparing higher education students for expert activity is based on three core pedagogical strategies.

Scheme 5. Three Pedagogical Strategies for Developing Expert Activity

1. **Competence-Based Strategy.** Development of analytical, evaluative, and research competencies.
2. **Research-Oriented Strategy.** Integration of expert tasks into independent scientific and project activities.
3. **Reflective and Self-Assessment Strategy.** Development of self-analysis, self-evaluation, and continuous professional improvement.

The integration of these strategies creates an effective educational environment for the systematic development of expert competencies.

Mechanism, Effectiveness, and Functional Environment of the Model for Preparing Higher Education Students for Expert Activity

The conceptual mechanism and effectiveness of the model "Preparing Higher Education Students for Expert Activity" are determined by its systemic orientation toward the development of students' independent analytical and evaluative competencies. The model functions as an integrated pedagogical system aimed at strengthening students' research independence and professional responsibility.

The effectiveness of the model is manifested through the following key functional characteristics:

- It supports students' independent learning activities based on a unified educational objective.

- It ensures continuous monitoring and improvement of learning outcomes related to expert competencies.
- It creates productive conditions and new opportunities for self-expertise and reflective learning.
- It promotes the dynamic development of students' expert abilities and analytical thinking.
- It ensures stability and consistency in the process of self-expertise within independent academic work.

Thus, the model serves as a mechanism for organizing students' self-regulated learning and developing their capacity for objective evaluation and evidence-based decision-making.

Three Functional Environments of the Model

From a modern pedagogical perspective, the effective implementation of expert activity in students' scientific and pedagogical practice requires the creation of three interconnected environments. These environments represent practical conditions that integrate evaluation criteria, performance indicators, and levels of student activity.

Table 3

Three Functional Environments of the Model for Preparing Higher Education Students for Expert Activity

Preparation Environment	Practice Environment	Presentation Environment
Characterizes the student's readiness to engage in expert activity and develop initial competencies.	Reflects the student's ability to apply expert skills independently within research and academic work.	Demonstrates the student's readiness to present, justify, and defend the results of expert activity.
Development of theoretical knowledge and methodological understanding	Implementation of analytical and evaluative tasks	Public presentation and professional communication of results
Formation of motivation and self-assessment skills	Practical application of expert methods	Reflection and external evaluation

The integration of these three environments ensures the gradual and systematic development of students' expert competence. As a result, each student demonstrates measurable progress in expert activity through preparation, practical application, and professional presentation.

Feedback Principle and Expert Support System

An essential component of the model is its reliance on the feedback principle, which ensures continuous improvement and effectiveness of the pedagogical process (Hamidova, 2026). The preparation of students for expert activity is organized through a specialized expert-service support system, which provides methodological guidance, monitoring, and professional consultation (Mikayilli, 2025).

This system enables students to:

- develop independently as emerging experts,
- conduct self-analysis of their academic and research performance,
- engage in continuous self-improvement,
- gradually build professional expert competence.

The feedback principle also reflects the transformation of educational relationships. As noted in pedagogical research, the activation of interactions between teachers and students leads to a transition from subject-object relations toward subject-subject interaction, thereby enhancing collaboration and responsibility within the learning process (Mammadi, 2016).

Scheme 5. Interaction Model of the Educational Process with Expert-Service Support

Title: Interaction and Mutual Influence of the Educational Process through Expert-Service Support

Structure (for professional diagram design):

Central Element: Educational Process

Surrounding Participants (connected through feedback arrows):

- Institutional Management / Administration
- Teachers / Supervisors
- Students (Learners)
- Parents (where applicable)
- Internal Expert Specialist / Expert Service Unit

Core Principle: All interactions are organized based on the Feedback Mechanism, ensuring continuous monitoring, evaluation, and improvement.

Functional Outcomes:

- Development of students' expert competence
- Strengthening of independent research skills
- Improvement of educational quality

- Formation of subject-subject pedagogical interaction

(This scheme is best designed as a circular or network diagram with bidirectional arrows.)

Pedagogical Significance of the Model

The integration of structured environments and feedback-based support transforms the model into a dynamic system that:

- enhances students' self-learning and self-regulation capacities,
- develops professional analytical culture,
- supports evidence-based educational decision-making,
- contributes to quality assurance in higher education.

By organizing expert preparation within preparation, practice, and presentation environments, the model creates sustainable conditions for the formation of students as independent expert participants in scientific and educational processes.

Development of Reflective and Analytical Competencies in Preparing Higher Education Students for Expert Activity

Within the framework of preparing higher education students for expert activity, it is essential to develop their ability to analyze independent academic work from a professional perspective. A student acting as an expert must be able to identify the objectives and underlying motivations of a given task, evaluate its effectiveness, detect existing shortcomings, and propose an improved structure or alternative solution based on analytical reasoning. As noted by Abbasov (2010), when analyzing independent work, a student-expert should identify deficiencies and present a more effective organizational model as a project (Mikayilli, 2025).

The formation of such competencies requires the use of reflective, analytical, and interactive pedagogical tools that stimulate critical thinking and self-assessment (Mikayilli, 2025).

Reflective Essay as a Tool for Expert Development

One of the effective methods for developing expert thinking among students is the use of a reflective essay, which promotes initiative, independence, and creative potential.

Table 4

Model of the Reflective Essay

Essay Content	Essay Structure and Plan
Reflection helps students construct a logical chain of experience, systematize acquired knowledge, and compare their achievements with those of peers.	The structure of the essay is determined by academic requirements:
It enables students to understand past learning experiences and evaluate the effectiveness of their work.	1. Introduction
Reflection is guided by questions such as:	2. Thesis statement
- Today I learned that...	3. Arguments and evidence
- It was difficult to...	4. Conclusion
- I understood that...	
- Now I can...	
- I was surprised by...	
- I am ready to...	

A well-developed plan plays a crucial role, as it disciplines thinking, ensures logical organization of material, and promotes concise expression of ideas (Hasanov & Agayev, 2007).

“Expert Comments” Competitive Model

Another effective pedagogical tool is the competitive analytical activity “My Expert Comment in One Sentence”, which develops logical reasoning and evaluative competence.

Table 5

Model of the Competitive Game “Expert Comments”

Levels of Expert Logical Thinking	Analytical Outcomes Achieved by Student-Experts
Knowledge	Identifies the characteristics of the statement or proposal
Comprehension	Explains meaning through wording and intonation
Application	Constructs sentences and applies appropriate expressive means
Analysis	Identifies factors influencing interpretation
Synthesis	Modifies and adapts statements for different contexts
Evaluation	Presents a brief analytical conclusion or mini-presentation

This model aligns with higher-order cognitive processes and contributes to the development of expert-level analytical thinking.

Discussion as a Methodological Basis for Expert Thinking

Expert competence is also formed through structured academic discussion. In pedagogical expertise, discussion functions as a methodological tool that transforms questions into analytical conclusions.

Table 6

Role of Discussion in Preparing Students for Expert Activity

Components of Discussion	Characteristics
Questions	Instructional and corrective
Answers	Correct, incorrect, or incomplete
Presentations	Recommendation-based analytical opinions

The recommendations generated during discussion serve to identify and eliminate deficiencies in research content. Thus, expert conclusions emerge from analytical questioning, which enhances students’ expert thinking.

Mini-Models for Developing Student Expert Competence

To strengthen students’ readiness for expert activity, the use of mini-models is pedagogically justified. These models increase motivation, stimulate analytical interest, and form professional expert attitudes.

Table 7

Mini-Models for Preparing Students for Expert Activity

Mini-Model	Purpose and Educational Tasks
Scientific Questioning Model	Determines expert thinking through analytical questions such as Why? How? For what purpose? In what way? Develops research-oriented reasoning.
Role-Playing Game “I Am an Expert”	Uses role-based learning to simulate expert activity. Students evaluate work results, present conclusions, and engage in peer verification and critique.
Case (Situation) Analysis	Develops cognitive operations: understanding, application, analysis, synthesis, interpretation, and evaluation. Case tasks are practice-oriented and require specialized knowledge.
Mini-Research Project	Students select a research topic, formulate hypotheses, choose methods, and interpret results. Guided by questions such as: What interests me most? What do I want to investigate? What information do I need and how can I obtain it?

These models ensure scientific-methodological support for planning and conducting research activities.

Pedagogical Effectiveness of Mini-Models

The analysis of the presented mini-models allows for the following general scientific conclusion: the implementation of mini-models in preparing higher education students for expert activity is pedagogically purposeful and effective.

Their application in scientific and pedagogical practice provides:

- methodological support for topic selection, planning, and implementation;
- development of analytical and critical thinking;
- the ability to identify and solve research problems;
- application of modern methods and approaches;
- skills in working with scientific information;
- interpretation and evaluation of research results.

Within this framework, the student acts as an emerging expert who critically evaluates theoretical concepts, selects appropriate didactic materials, and independently analyzes the outcomes of small-scale research.

The Role of Independent Study in Developing Students’ Expert Competence in Higher Education

An essential component of preparing students for expert activity is the organization of **independent student work**. Independent learning activities play a decisive role in the formation of analytical, evaluative, and research competencies. It is within the framework of independent work that a student develops the ability to act as an emerging expert, including the capacity to analyze didactic systems, present their integrative characteristics, and even conduct demonstration lessons (Abbasov, 2010).

Independent student work in higher education can be structured through the integration of three interrelated forms:

1. Out-of-class independent work
2. In-class independent work under teacher supervision
3. Creative and research-oriented independent work

These forms create a gradual learning trajectory that supports the development of students’ autonomy and professional responsibility.

However, achieving a high level of expert competence requires a shift in educational philosophy. Higher education institutions should not only provide ready-made knowledge but should primarily teach students how to acquire knowledge independently (Rustamov & Dadashova, 2007). Therefore, in order to develop expert skills effectively, it is pedagogically appropriate to move from simple tasks toward more complex and research-oriented assignments.

Examples of independent tasks that contribute to the development of expert competence include:

- Designing visual and didactic materials for studied topics
- Preparing for lectures, seminars, practical, and laboratory classes
- Presenting and critically analyzing scientific articles
- Identifying unresolved or undiscussed problems within course content
- Completing analytical and assessment tasks
- Writing reports, abstracts, theses, and scientific papers on problem-based topics
- Participating in the development of test materials
- Performing research and creative assignments
- Writing and critically analyzing course papers and graduation projects
- Participating in independent topic analysis within round-table discussions

Such activities develop students' abilities to analyze information, evaluate academic content, and make evidence-based conclusions—key components of expert thinking.

Independent Learning Environments Supporting Expert Competence

Currently, the higher education system in Azerbaijan places increasing emphasis on independent learning in order to achieve higher standards of analytical and expert competence. Several institutional initiatives illustrate this trend:

- ADA University - Research and educational environments such as *Big Data laboratories* aimed at training national analytical specialists.
- SABAH Groups Project - Preparation of students with advanced logical thinking and information analysis skills.
- Khazar University - Internal research initiatives focused on developing critical and analytical thinking among students.

These environments demonstrate the growing institutional support for developing students' expert-oriented competencies through research-based learning.

General Scientific and Pedagogical Conclusions

Based on the theoretical and practical analysis of the presented scientific and pedagogical foundations, the following general conclusions can be drawn regarding the preparation of higher education students for expert activity:

- a) Expert activity represents the result of comparing, generalizing, and abstracting qualitative and quantitative indicators. These cognitive operations function in an integrated manner and form the basis of analytical evaluation.
- b) Expert activity serves as a powerful tool for students' self-development. It influences self-regulation, enhances motivation, and directs students toward purposeful and reflective learning.
- c) The content of the model "*Preparing Higher Education Students for Expert Activity*" introduces innovative opportunities, including the development of self-assessment skills and the formation of a critical attitude toward one's own research results.

Thus, the model contributes to the formation of reflective, independent, and analytically competent future professionals.

Scientific Novelty and Significance of the Study

The purpose and value of the present study are reflected in its scientific novelty as well as its theoretical and practical significance.

Table 7

Scientific Novelty, Theoretical, and Practical Significance of the Study

Scientific Novelty	Theoretical Significance	Practical Significance
Development of a model for preparing Azerbaijani higher education students for expert activity aimed at improving the quality of independent learning.	Identification of the methodological foundations of pedagogical expert activity and their systematization as theoretical and practical materials for use in higher education institutions.	Expert activity supports students in conducting regular analysis of their research work, contributes to their formation as emerging experts, develops analytical and evaluative skills, and prepares them for professional expert practice.

Within the framework of this study, the research direction is defined as "Expert Activity in Higher Pedagogical Education", while the core problem is the optimization of students' independent work, particularly in the field of scientific research. The primary objective of the study is the scientific substantiation of the characteristics of expert activity in higher education and the development of a structured model for preparing students for such activity.

Conclusion

The transformation of higher education under the conditions of globalization and the knowledge-based economy requires the development of students' analytical, evaluative, and research competencies as essential components of professional readiness. In this context, the preparation of higher education students for expert activity emerges as a significant pedagogical task directly related to improving the quality, transparency, and effectiveness of educational outcomes.

The present study substantiates the scientific and pedagogical foundations of a model designed to prepare students for expert activity within the framework of independent learning and research practice. The analysis of theoretical sources, national educational priorities, and contemporary pedagogical approaches confirms that expert activity represents an integrative process based on comparison, generalization, interpretation, and objective evaluation of educational and research results.

The proposed model is characterized by a systematic structure that integrates preparation, practical application, and presentation environments, supported by continuous feedback and institutional expert-service assistance. Such an approach ensures the gradual development of students' expert competence, promotes reflective thinking, strengthens self-assessment skills, and fosters responsibility for learning outcomes. The organization of independent student work plays a decisive role in this process, enabling learners to move from simple academic tasks to complex research and analytical activities.

The study also demonstrates that the use of reflective methods, mini-models, discussion-based learning, and role-oriented tasks contributes to the formation of expert thinking, critical analysis, and evidence-based decision-making. These pedagogical tools create favorable conditions for developing students' motivation for research, their ability to work with scientific information, and their readiness to evaluate both their own work and the work of others.

The scientific novelty of the research lies in the development and pedagogical justification of a competency-oriented model for preparing higher education students for expert activity within the Azerbaijani educational context. Its theoretical significance consists in systematizing the methodological foundations of pedagogical expertise, while its practical value is reflected in the possibility of implementing the model in higher education institutions to enhance the quality of independent learning and research training.

In general, the implementation of the proposed model contributes to the formation of reflective, autonomous, and analytically competent graduates capable of participating in educational quality assurance and professional expert processes. The integration of expert-oriented learning into higher education practice can be considered an important direction for modernizing the educational process and increasing its effectiveness in accordance with national and international standards.

Future research may focus on the empirical validation of the model, the development of diagnostic tools for assessing students' expert competence, and the expansion of institutional mechanisms supporting student participation in expert and quality assurance activities.

Ethical Considerations

The study was conducted in accordance with academic ethical standards. The research did not involve experimental interventions with human subjects that required institutional ethical approval. All theoretical materials and conceptual developments were prepared with proper respect for academic integrity and intellectual property. Any referenced ideas and frameworks were used in compliance with scholarly citation principles.

Acknowledgements

The author expresses sincere gratitude to the Azerbaijan Institute of Education for its institutional support and for providing an academic environment conducive to scientific research and pedagogical innovation.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or non-profit sectors.

Conflict of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

Conclusion

The analysis of state educational policies, scientific literature, and international experience confirms that the development of students' readiness for expert activity is a critical factor in improving the quality of higher education. The proposed model provides a scientifically grounded framework for creating an educational environment that supports the development of expert competencies. Its implementation will contribute to enhancing students' independent research skills, analytical thinking, and professional responsibility, thereby improving educational quality and institutional effectiveness.

References:

1. Abbasov, A. N. (2010). *Pedagogy: A textbook for secondary specialized educational institutions*. Baku: Mutarjim Publishing.
2. Abbasov, A. M. (2016). Psychopedagogical characteristics of general education standards. *Curriculum Journal*, (4), 5-10.
3. Hamidova Kh, A. (2026). Organizational, Pedagogical, and Health-Preserving Requirements for the Implementation of a Holistic Health-Oriented Educational Process in Contemporary Education Systems. *Science, Education and Innovations in the Context of Modern Problems*, 9(1), 1451-1458. <https://doi.org/10.56334/sei/9.1.129>
4. Jabrayilov, I. H. (2016). Priorities of education policy in Azerbaijan: Modern approaches. In *Proceedings of the International Scientific Conference* (pp. 22-23). Baku: Center for Educational Technologies.
5. Hasanov, F., & Agayev, A. (2007). *Pedagogy*. Baku: Nasir Publishing.
6. Mammadli, L. A. (2014). *Ways of developing students' cognitive activity* (Doctoral dissertation abstract). Baku: Mutarjim Publishing.
7. Rustamov, F. A., & Dadashova, T. Y. (2007). *Higher education pedagogy (Textbook for master's level)*. Baku: Nurlan Publishing.
8. Askolskaya, E. A. (2010). Some aspects of expert selection methodology based on assessing the level of trust in professional judgment. *Proceedings of the Orenburg State Agrarian University*, 4(28), 170-172.
9. Valeev, G. H. (2006). Expertise of scientific research in the field of socio-humanitarian knowledge. *Pedagogy*, (5), 23-29.
10. Mikayilli B. (2025). Universities and the Contemporary Educational Environment in Developed Countries: Comparative Analysis of Institutional Innovation, Entrepreneurial Functions, and International Research Collaboration in Germany, Poland, and the Czech Republic. *Science, Education and Innovations in the Context of Modern Problems*, 8(11), 450-465. <https://doi.org/10.56352/sei/8.11.34>
11. Gareeva, G. N. (2013). *Formation of competence in expert evaluation of the educational environment among master's students* (Doctoral dissertation abstract). Vladikavkaz: North Ossetian State University.
12. Zhigalyev, B. A. (2011). The essence of evaluative expertise in the quality of professional education in universities. *Higher Education in Russia*, (3), 58-62.
13. Ahmadov, H. (2026). A Historical and Comparative Study of Azerbaijani-German Scientific, Pedagogical, and Literary-Cultural Relations (19th-Early 20th Centuries): Education, Language, and Intellectual Exchange in the Caucasus. *Science, Education and Innovations in the Context of Modern Problems*, 9(2), 1-6. <https://doi.org/10.56334/sei/9.2.15>
14. Ivanov, D. A. (2008). *Expertise in education: A textbook for higher pedagogical institutions*. Moscow: Akademiya.
15. Najafov, R. (2025). *On the sociology of education, management and analysis of the principles of orientation of education in the aspect of socialization of the individual*. SSRN. <https://ssrn.com>
16. Najafov, R. (2025). A comprehensive study of the factors and patterns of formation of deviant behavior among young people. *Science, Education and Innovations in the Context of Modern Problems*, 8(1), 748-771. https://imcra-az.org/uploads/public_files/2025-04/deviant-behavior.pdf
17. Ivanchenko, G. V., & Leontiev, D. A. (2006). *Expertise in the modern world: From knowledge to activity*. Moscow: Smysl.
18. Ignatieva, O. A. (2013). The institute of expertise as a subject of scientific research: A sociological perspective. *History and Socio-Educational Thought*, (6), 125-127.
19. Kucher, S. (2008). The ideal expert in education. *Public Education*, (5), 102-107.
20. Lobok, A. (2007). A model of the professional expertise institute in pedagogical innovation. *School Technologies*, (5), 69-78.
21. Motova, G. N., & Navodnov, V. G. (2008). *Quality assurance expertise in education: A European approach*. Moscow: National Accreditation Agency in Education.
22. Novikova, T. (2006). Expertise of innovations in education: Training experts for civil institutions. *Public Education*, (4), 104-109.
23. Prusak, A. I. (2006). A key requirement for experts in education: Professional wisdom. *School Technologies*, (5), 161-165.
24. Samigullina, G., & Bagaviev, I. (2007). Teacher performance expertise: What an expert should and should not do. *School Director*, (8), 47-52.
25. Sannikova, L. N. (2005). *Preparing university students for expertise of the preschool educational process* (Doctoral dissertation). Magnitogorsk.

26. Semago, M. M. (2005). *Expert activity of a psychologist in an educational institution* (2nd ed.). Moscow: Airis Press.
27. Umnyashova, I. B. (2017). Professional ethics of specialists conducting psychological and pedagogical expertise in education. *Bulletin of Practical Psychology of Education*, (3), 25–29.
28. Umnyashova, I. B., & Safuanov, F. S. (2017). A model of psychological and pedagogical expertise in the education system. *Psychological Science and Education*, 22(4), 75–83.