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**MANAGERIAL MODEL FOR QUALITY ASSURANCE IN GENERAL
EDUCATION BY THE LOCAL SPECIALIZED AUTHORITY IN THE
DOMAIN OF EDUCATION**

531.02. Educational management

Summary of the Doctoral Thesis in Educational Sciences

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CONCEPTUAL FRAMEWORK OF THE RESEARCH

Relevance and significance of the research problem. Social, economic and technological transformations, digitalisation, and increasing expectations regarding the performance of educational services necessitate the development of coherent management mechanisms for quality assurance and continuous improvement in education.

At the international level, educational policies promote the complementarity of internal and external evaluation, data- and evidence-informed management, institutional capacity development, and leadership for quality. The international experiences examined highlight the role of intermediate and local-level structures in coordinating, monitoring, and supporting institutional development.

In the Republic of Moldova, the Education Code assigns responsibility for quality management at the local level to the Local Specialised Authority in the Domain of Education (OLSDÎ) [21]. The *Education 2030* Strategy [11], the Framework Regulation on the Organisation and Functioning of OLSDÎ [13], and relevant methodological documents establish responsibilities for planning, coordination, monitoring, evaluation, and support. However, these responsibilities are regulated through separate functions and procedures, without an integrated management mechanism capable of ensuring continuity between diagnosis, planning, implementation, monitoring, evaluation, feedback, and continuous improvement.

The foundations of quality management and continuous improvement are developed in the works of *J. M. Juran* and *W. E. Deming* [5; 17], while *V. Guțu's* research addresses quality management and quality assurance systems in general education at the local level [10]. These perspectives are complemented by contributions concerning educational management, quality culture, and the development of professional competences [1–4]. Nevertheless, no integrated theoretical and methodological framework was identified that, in the specific context of OLSDÎ, brings together institutional responsibilities, the managerial model, its operationalisation mechanism and instruments, while also specifying the role of the competence of the specialist responsible for this process.

Research Aim: The theoretical and methodological substantiation, development and validation of the Managerial Model for Quality Assurance in General Education at the Local Level by the Local Specialised Authority in the Domain of Education (OLSDÎ).

Research Objectives: (1) To analyse and systematise theoretical foundations, models, frameworks and international practices relevant to quality management at the local level; (2) to analyse the regulatory, institutional and methodological framework and substantiate the axiological and functional framework by identifying the responsibilities of OLSDÎ and the relevant values and principles; (3) to empirically investigate the functioning of quality management processes and identify vulnerabilities and development needs; (4) to develop the Managerial Model, its operationalisation mechanism and a functional system of instruments by integrating quality assurance areas and managerial processes; (5) to conceptualise, structure and operationalise the quality management competence of OLSDÎ specialists and develop the Competence Assessment Reference Framework; (6) to develop and implement the Programme and action-oriented approach for developing the competence of OLSDÎ specialists, with a view to validating the Managerial Model.

Research Methodology: The research integrated theoretical, empirical and experimental dimensions, employing theoretical methods – literature review, analysis and synthesis, comparison, generalisation, systematisation and modelling; empirical methods – questionnaire-based surveys, content analysis and pedagogical experimentation; and qualitative and statistical analysis methods,

using IBM SPSS Statistics 29. The research included a pre-experimental study involving 141 OLSDÎ specialists and a pedagogical experiment involving 120 specialists, organised into baseline assessment, training and post-training assessment stages, using a within-subjects design. Competence was assessed using the Reference Framework developed within the research, structured around seven competence units. The training intervention lasted eight weeks, and the PRE–POST analysis employed descriptive statistics, the Wilcoxon signed-rank test for paired samples and, as complementary analyses, Spearman’s rank correlation coefficient and the Kruskal–Wallis test.

Scientific Novelty and Originality: The scientific novelty and originality of the research lie in the theoretical and methodological substantiation and development of the Managerial Model for Quality Assurance in General Education by OLSDÎ, conceived as an open, dynamic and integrative system; the configuration of its operationalisation mechanism through five interdependent managerial macroprocesses structured according to the PDCA cycle; the identification of eight quality assurance areas and the transversal integration of the digital dimension and risk management; the conceptualisation and structuring of the quality management competence of OLSDÎ specialists; and the development of the Competence Assessment Reference Framework, the Training Programme and the corresponding action-oriented approach to competence development.

The Scientific Problem Addressed and Resolved: The scientific problem resolved consists in the theoretical and methodological substantiation and development of the Managerial Model for Quality Assurance in General Education at the OLSDÎ level and its operationalisation mechanism, through the coherent integration of the axiological framework, areas of intervention, managerial processes and instruments, and specialists’ competence. This has enabled the establishment of a unified managerial framework necessary for OLSDÎ to fulfil its responsibilities for quality assurance in general education.

Theoretical Significance of the Research: The theoretical significance lies in the development of the conceptual and methodological framework for quality management at the local level through the substantiation of the values, principles and functional relationships underpinning the Managerial Model; the conceptualisation of its process-based and self-regulating mechanism; the identification of areas of intervention; and the development of the concept of quality management competence of OLSDÎ specialists.

Practical Value of the Research: The practical value lies in the potential application of the Managerial Model, its mechanism and managerial instruments to diagnosis, planning, implementation, monitoring, evaluation and continuous improvement. The Competence Assessment Reference Framework and the Training Programme can support the assessment and development of OLSDÎ specialists’ competences.

Scientific Results Submitted for Defence:

1. The Managerial Model constitutes an open, dynamic and integrative system that interrelates theoretical, regulatory and institutional foundations, the axiological framework, resources, specialists’ competence, the eight areas of quality assurance and the managerial mechanism, with a view to continuous improvement.

2. The axiological and principled framework integrates the principles of systemic and process-based approaches, learner and stakeholder orientation, evidence-based decision-making, participation, adaptability and continuous improvement, together with the values of professionalism, public accountability, equity, transparency, collaboration and results orientation.

3.The managerial mechanism integrates five macroprocesses – diagnosis and forecasting; policy development and strategic planning; organisation and implementation; monitoring and evaluation; and feedback and continuous improvement – structured according to the PDCA cycle, supported by managerial instruments and incorporating the digital dimension and risk management as transversal elements.

4.The quality management competence of OLSDÎ specialists represents an integrated professional-managerial capacity structured into four components – conceptual-normative, processual-managerial, analytical-decisional and axiological-relational – with the digital dimension integrated transversally. Its operationalisation through seven competence units and 21 indicators enables the assessment, development and evaluation of this competence.

5.The Training Programme and the action-oriented training approach translate the foundations of the Managerial Model into practical professional situations and outputs. The PRE–POST results demonstrate statistically significant improvements across all seven competence units and the overall competence score, supporting the effectiveness of the training approach within the limitations of the experimental design.

Implementation and Evaluation of Scientific Results. The research results were applied through a pre-experimental study involving 141 OLSDÎ specialists and the implementation of the Training Programme with 120 specialists. The PRE–POST assessment revealed improvements across all seven competence units and in the overall competence score. All 120 participants achieved higher overall scores at POST than at PRE, with the Wilcoxon signed-rank test indicating a statistically significant difference ($Z = -9.569$; $p < 0.001$) and a large effect size ($r = 0.874$). These findings support the development of quality management competence and the relevance of the training approach to the application of the proposed Managerial Model.

Dissemination and Academic Validation of Scientific Results. The research findings were presented within the institutional research project “*Theoretical and Methodological Aspects of Reconfiguring the Educational Process from the Perspective of New Approaches in Educational Sciences*” (UST.PCST.20.2022), as well as at 10 scientific events, including eight international events:

- The 5th International Conference *Education in the Digital Era*, Danubius International University, 23 July 2026.
- The International Symposium *Kreatikon: Creativity–Training–Performance*, “Creativity and Innovation – Prerequisites for Excellence in Education”, Petre Andrei University, 25–26 April 2026.
- The International Scientific Conference *Educational Management: Achievements and Development Prospects*, Alecu Russo State University of Bălți (USARB), 23–24 April 2026, Bălți.
- The International Scientific Conference *Science and Education: New Approaches and Perspectives*, Ion Creangă State Pedagogical University, 19–20 March 2026, Chişinău.
- The Annual Scientific Conference of Doctoral Students *Research, Innovation, Development*, 2nd edition, Ion Creangă State Pedagogical University, Chişinău, 2025.
- The International Scientific Conference *Science and Education: New Approaches and Perspectives*, Ion Creangă State Pedagogical University, 24–25 March 2023, Chişinău.
- The International Scientific Conference *Higher Education: Traditions, Values, Perspectives*, Ion Creangă State Pedagogical University, Chişinău, 29–30 September 2023.
- The International Congress *Research–Innovation–Innovative Entrepreneurship*, Ion Creangă State Pedagogical University, 13–14 October 2023, Chişinău.

- The 71st Student Scientific Conference with International Participation, Tiraspol State University, 20 April 2022, Chişinău.

- The International Scientific Conference *Adapting the Educational System to New Approaches in Contemporary Society: Challenges and Solutions*, Tiraspol State University, 18–19 August 2022.

Publications Related to the Thesis. A total of 12 scientific works have been published on the thesis topic: four articles in scientific journals, seven papers in the proceedings of conferences and other scientific events, and one methodological guide (co-authored).

Structure of the Thesis. The thesis is written in Romanian and comprises an introduction, three chapters, general conclusions and recommendations, a bibliography containing 130 references, and 10 appendices. It includes 138 pages of main text, eight figures and 31 tables.

Keywords: quality management, quality assurance, educational management at the local level, managerial model, managerial mechanism, quality management competence, data-informed management, PDCA, continuous improvement.

CONTENT OF THE THESIS

The thesis comprises an introduction, three chapters, general conclusions and recommendations, a bibliography and appendices.

Chapter 1, “*Theoretical and Methodological Foundations of Quality Management in General Education at the Local Level*”, is devoted to the theoretical and methodological substantiation of quality management in general education at the local level. It examines the evolution of the concept of quality, contemporary approaches, managerial principles, functions and processes, as well as relevant international models, frameworks and experiences. The analysis aimed to identify and systematise the foundations required to substantiate the Managerial Model for Quality Assurance in General Education by the Local Specialised Authority in the Domain of Education (OLSDÎ).

The analysis of the evolution of the concept of quality revealed a shift from traditional approaches, predominantly focused on inspection, control and compliance, towards systemic, process-based and strategic perspectives oriented towards beneficiaries, organisational performance and continuous improvement. This evolution reflects the extension of managerial responsibility from verifying results to preventing non-conformities, managing processes, developing a quality culture and creating value for beneficiaries [5; 14; 17; 27].

The theoretical substantiation drew upon the contributions of *J. M. Juran and W. E. Deming* [5; 17] concerning quality management processes, managerial responsibility and continuous improvement, as well as the multidimensional perspective on quality developed by *L. Harvey and D. Green* [14]. In the Domain of education, relevant contributions included those of *Ş. Iosifescu* [16] concerning the conceptualisation of quality and organisational development; *V. Guţu* [9; 10] concerning quality management and quality assurance systems in general education at the local level; and *S. Baci* [2] concerning quality culture and institutional management mechanisms. These perspectives were complemented by the contributions of *V. Andriţchi* [1] concerning human resource

management and professional development, and V. Gh. Cojocaru [4] concerning the relationship between competence, performance and quality.

The synthesis of the approaches examined highlighted the complex and multidimensional nature of educational quality, which requires simultaneous consideration of educational aims and outcomes, educational and managerial processes, resources, values and beneficiaries' needs. Quality therefore extends beyond compliance with standards and the assessment of immediate outcomes, encompassing institutional capacity development, equity, social relevance and continuous improvement [14; 16; 27].

In the context of the present research, *quality in education is understood as the capacity of the education system and its management structures to ensure, through processes that are planned, monitored, evaluated and continuously improved, the achievement of relevant, equitable and sustainable educational outcomes for beneficiaries and society.*

This definition integrates the outcome dimension with the process-based and managerial dimensions, emphasising that the achievement of educational quality depends not only on standards and regulations but also on the coherent functioning of the managerial mechanisms through which processes and outcomes are designed, supported, evaluated and improved.

The theoretical and methodological substantiation of quality management enabled the distinction between quality management and quality assurance to be clarified and the principles, functions and processes relevant to local educational administration to be identified [10; 15; 16; 27].

In the context of the present research, quality management is approached as an overarching concept encompassing the processes of quality planning, assurance, monitoring and control, evaluation and improvement, whereas quality assurance refers to the dimension through which the conditions and mechanisms necessary to meet quality requirements are established and maintained. At OLSDÎ level, quality assurance is approached within a systemic managerial logic and integrated into the processes of diagnosis, planning, implementation, monitoring, evaluation and continuous improvement [15; 16; 27].

The analysis of quality management functions and processes revealed the convergence of approaches oriented towards planning, organising, coordinating, monitoring, evaluating and continuously improving activities. The Quality Trilogy developed by J. M. Juran [17], the adaptation of quality management to the educational context by V. Guțu [9; 10], and the contributions of V. Gh. Cojocaru [4] provided a basis for understanding the interdependent nature of managerial processes.

The synthesis of these approaches enabled the identification of a process-based and cyclical logic integrating diagnosis and forecasting, planning, organisation and implementation, monitoring and evaluation, feedback and continuous improvement. The relevance of this perspective for OLSDÎ lies in the possibility of linking institutional responsibilities within a coherent management cycle, in which diagnostic findings inform planning, monitoring and evaluation support decision-making, and feedback guides the adjustment of interventions [5; 10; 17; 27].

The cyclical and self-regulating nature of quality management was further explored through the analysis of the PDCA (Plan–Do–Check–Act) cycle, which connects planning, implementation, checking results and taking action for improvement [5; 15; 17]. In this research, PDCA is used as a

methodological reference for organising interdependent processes and using evaluation findings to inform subsequent interventions, rather than as a model mechanically transferred to OLSDÎ level.

The analysis of quality management principles and national and international policy documents highlighted the relevance of beneficiary orientation, leadership, stakeholder involvement, the process-based approach, evidence- and data-informed decision-making, relationship management and continuous improvement [6; 7; 15; 27]. These principles support the development of a quality culture, managerial accountability, stakeholder participation and development-oriented evaluation. The analysis also emphasised the importance of developing the professional competences required to use data, instruments and managerial processes effectively in educational quality assurance.

The comparative analysis of quality management models and frameworks covered ISO 21001:2025, Total Quality Management (TQM), the European Foundation for Quality Management Model (EFQM 2025), the Common Assessment Framework (CAF 2020) and the Baldrige Excellence Framework (Education). The analysis highlighted the complementarity of these frameworks in promoting systemic and process-based approaches, quality culture, leadership, strategic orientation, stakeholder participation, data- and evidence-informed management, performance evaluation and continuous improvement. At the same time, differences in their areas of application and operational mechanisms were identified, establishing that none of the frameworks examined fully addresses the specific characteristics of quality management at OLSDÎ level. Consequently, the research substantiates the need for selective and context-sensitive application of relevant elements, taking into account the responsibilities of local educational administration for coordinating, monitoring, evaluating and supporting educational institutions, without adopting any existing model in its entirety.

In addition to the analysis of quality management models, the international instruments Programme for International Student Assessment (PISA) and Teaching and Learning International Survey (TALIS), coordinated by the OECD, were examined. PISA provides comparative data on students' competences and equity in educational outcomes, while TALIS provides information on teachers, school leaders, professional development, leadership, collaboration, and teaching and learning conditions. The analysis highlighted the relevance of data and indicators for diagnosis, monitoring and decision-making, as well as the need for their contextualised interpretation through correlation with national, local and institutional information.

The comparative analysis of experiences from Austria, Estonia, Finland, Singapore and Romania highlighted the relevance of systemic approaches to quality management, the role of intermediate structures in coordination and support, educational leadership, quality culture, data- and indicator-informed management, and self-evaluation and development-oriented evaluation. The importance of developing the professional capacity of the actors involved and using monitoring and evaluation findings to inform decision-making and continuous improvement was also emphasised. The diversity of the institutional arrangements examined confirms that these foundations have potential for application at OLSDÎ level through adaptation to the regulatory framework, responsibilities and particularities of the education system in the Republic of Moldova, without transferring the models and practices examined in their entirety [3; 20].

The theoretical, methodological and comparative synthesis led to the identification of six fundamental foundations of the research: the systemic and process-based approach to quality management; quality culture; educational leadership; data- and evidence-informed management; development-oriented evaluation; and the development of quality management competences [5; 10].

These foundations reflect the integration of theoretical contributions, managerial principles, functions and processes, international models and frameworks, evaluation instruments and educational experiences examined. They address the need for theoretical substantiation set out in the research hypothesis and provide the conceptual basis for the development, in Chapter 2, of the Managerial Model for Quality Assurance in General Education by OLSDÎ, its operationalisation mechanism and the competence-related component of the research.

Chapter 2, “*Substantiation and Operationalisation of Quality Management in General Education at OLSDÎ Level*”, constitutes the conceptual and constructive core of the research, focusing on the substantiation and development of the Managerial Model for Quality Assurance in General Education by the Local Specialised Authority in the Domain of Education (OLSDÎ). The research integrated the analysis of the regulatory, institutional and methodological framework; the conceptualisation of the quality management competence of OLSDÎ specialists; the substantiation of the framework of principles and values; the identification of areas of intervention; the configuration of the managerial mechanism; and the development of the system of instruments required to operationalise the Model.

The analysis of the regulatory, institutional and methodological framework revealed the existence of explicit responsibilities for quality management in general education, distributed across national, local and institutional levels. The Education Code of the Republic of Moldova establishes quality as a fundamental principle and assigns OLSDÎ responsibility for quality management at the local level. This mandate is further specified in the Framework Regulation on the Organisation and Functioning of OLSDÎ, approved by Government Decision No. 404/2015, and strategically guided by educational policy documents, including the *Education 2030 Development Strategy* [11; 13; 21].

The analysis of the institutional architecture highlighted the functional relationship between the national level, responsible for the regulatory, strategic and methodological framework; the local level, responsible for coordination, monitoring, evaluation and support; and the institutional level, where quality requirements are translated into educational processes and practices. Within this configuration, OLSDÎ acts as a link between national educational policies and the needs of the local education system by interpreting requirements, analysing information, identifying priorities and coordinating interventions [10; 13; 21].

The examination of methodological documents, including quality standards, the Instruction on External Monitoring and Methodological Assistance, approved by Ministry of Education and Research Order No. 89/2025, professional competence standards and the National Qualifications Framework, revealed the existence of relevant foundations for monitoring, evaluating and improving quality. However, these documents regulate distinct processes and responsibilities without establishing an integrated managerial mechanism specific to OLSDÎ or an explicit competence profile for the specialist responsible for quality management [12; 19].

Consequently, the analysis demonstrated that the problem lies not in the absence of regulatory responsibilities or methodological instruments, but in *their insufficient integration into a coherent managerial framework* capable of ensuring continuity between diagnosis, planning, implementation, monitoring, evaluation, feedback and continuous improvement. This finding substantiated the need to develop a Managerial Model that interrelates institutional responsibilities, resources, professional competence, areas of intervention and managerial processes [10; 13; 19; 21].

A distinct direction of the research focused on substantiating the quality management competence of OLSDÎ specialists, considered a professional-managerial resource necessary for the coherent fulfilment of institutional responsibilities. The analysis of theoretical approaches to professional and managerial competence, considered alongside the National Qualifications Framework, highlighted the integrative, contextual, action-oriented and evolving nature of competence. Competence involves not only possessing knowledge and skills but also mobilising and applying them in specific professional situations, under conditions of responsibility and autonomy [12].

The integration of the competence-based approach with the foundations of educational management, the principles and processes of quality management, and the specific responsibilities of OLSDÎ enabled the identification of a distinct professional-managerial construct. Within the body of literature examined, no unified conceptualisation of quality management competence specifically adapted to OLSDÎ specialists was identified, which justified the development of an original definition and conceptual structure [10; 15; 27].

In the present research, *the quality management competence of an OLSDÎ specialist is defined as the professional-managerial capacity to mobilise and apply knowledge, skills, experience, attitudes and values to diagnose and forecast the educational situation; plan, organise and coordinate quality assurance processes; critically use data and evidence to inform decision-making; monitor and evaluate outcomes; and initiate and support corrective and continuous improvement actions within the local education system, including in digitalised professional contexts.*

This definition highlights the adaptation of general managerial competence to quality assurance responsibilities by linking professional resources with managerial processes and situations specific to OLSDÎ activities. Competence is therefore conceptualised as an integrated capacity for professional analysis, decision-making and action, oriented towards achieving and improving quality objectives.

By relating professional requirements to institutional responsibilities, *four interdependent components of competence* were identified: conceptual-normative, processual-managerial, analytical-decisional and axiological-relational. The conceptual-normative component refers to the ability to interpret and apply concepts, regulations, standards and methodological frameworks. The processual-managerial component concerns the planning, organisation, coordination, monitoring and adjustment of processes. The analytical-decisional component involves selecting, verifying, interpreting and using data to inform decisions. The axiological-relational component integrates professional responsibility, equity, transparency, collaboration, feedback and beneficiary orientation [12].

The digital dimension was integrated transversally across the four components, as the use of technologies and information systems influences documentation, planning, data analysis, monitoring,

evaluation, communication and collaboration. It does not constitute an autonomous component but supports the integrated application of competence in digitalised professional contexts, while ensuring the responsible and ethical use of information.

The conceptual structure provides the basis for developing the *Competence Assessment Reference Framework for Quality Management*, through which the construct is operationalised into competence units, indicators and performance descriptors subsequently used in the experimental research. The competence thus substantiated constitutes a necessary professional-managerial condition for applying the Model, without replacing the other institutional, organisational and resource-related conditions required for its functioning.

The central constructive outcome of the chapter is the Managerial Model for Quality Assurance in General Education by OLSDĪ. The substantiation of the Model drew upon the six theoretical and methodological foundations identified in Chapter 1, the analysis of the regulatory and institutional framework, the specific responsibilities of OLSDĪ and the conceptualisation of specialists' competence. Systemic, process-based, information-and-decision-oriented, axiological-participatory and digital premises were identified and integrated into an original managerial architecture adapted to the level of local educational administration [10; 13; 15; 21; 25].

On the basis of the foundations and relationships presented, *the Managerial Model for Quality Assurance in General Education by OLSDĪ is defined as an open, dynamic and integrative system that brings together theoretical, regulatory and institutional foundations, principles and values, resources, the quality management competence of OLSDĪ specialists, quality assurance areas and interdependent managerial macroprocesses. Through these, information, requirements, needs and resources within the local education system are transformed into coordinated decisions and interventions that are monitored, evaluated and adjusted through feedback, with a view to continuously improving educational quality at the local level.*

The systemic nature of the Model derives from the interdependence of its components and functional relationships; its openness from its continuous responsiveness to requirements and changes in the educational environment; its dynamic nature from the possibility of adjusting processes on the basis of outcomes and feedback; and its integrative nature from the coordination of responsibilities, resources, areas of intervention and the managerial mechanism within a unified framework.

The framework of principles and values underpinning the Model was substantiated by relating quality management principles to the requirements and responsibilities of OLSDĪ. The principles identified include process-based and systemic approaches, beneficiary orientation, data- and evidence-informed decision-making, participation and shared responsibility, anticipation and adaptability, and continuous improvement. These were complemented by values such as professionalism, public accountability, equity, transparency, collaboration and orientation towards relevant educational outcomes [15; 16; 27].

The principles establish the functional foundations for organising and implementing managerial processes, while the values guide decisions, professional behaviours and relationships among the actors involved. Their integration provides the Model with an explicit axiological foundation and

supports the exercise of quality management as a public responsibility oriented towards beneficiaries, development and outcomes.

Eight interdependent areas of quality assurance were identified within the architecture of the Model: coherence of the regulatory and methodological framework at the local level; strategic management; curriculum management; monitoring of institutional management; evaluation and methodological guidance; human resource management; management of tangible and information resources; and partnership management.

These areas were identified through the analysis of OLSDÎ responsibilities, theoretical and methodological foundations, and the author's previous research on quality assurance areas at the local level. In the current configuration, quality management is not positioned as a separate area but as *an integrative managerial logic* applied across all areas of intervention. This reconceptualisation enabled a distinction to be made between the object of managerial intervention and the processes through which that intervention is organised and implemented. The areas define the domains in which OLSDÎ exercises quality management within the limits of its mandate, rather than constituting stages of the managerial mechanism [10; 13; 19; 21; 22].

The dynamic core of the Model is represented by the managerial operationalisation mechanism, conceptualised as a set of processes, functional relationships and feedback connections through which OLSDÎ organises, monitors, evaluates and adjusts interventions aimed at ensuring quality at the local level.

By relating process-based approaches to quality management to the specific responsibilities of OLSDÎ, the mechanism was configured through *five interdependent macroprocesses*: diagnosis and forecasting; strategic quality planning; implementation of interventions; monitoring and evaluation; and feedback and continuous improvement.

Diagnosis and forecasting provide an understanding of the state of the local education system through the collection, verification and interpretation of data and the identification of problems, needs, trends and risks. *Strategic quality planning* transforms diagnostic findings into a managerial vision, priorities, objectives, expected outcomes, indicators and interventions aligned with available resources and responsibilities. *Implementation of interventions* translates objectives into actions through stakeholder coordination, allocation of responsibilities, mobilisation of resources and provision of institutional support. *Monitoring and evaluation* track progress and assess outcomes against established objectives and indicators, providing information for subsequent decisions. *Feedback and continuous improvement* transform evaluation findings into adjustment measures, preventive and corrective actions, revised interventions and the initiation of new management cycles [10; 15; 17; 26].

The macroprocesses are contextualised within the logic of the *PDCA (Plan–Do–Check–Act) cycle*, without assuming a rigid numerical correspondence between its four phases and the five macroprocesses. The Plan phase integrates diagnosis and forecasting, as well as policy development and strategic planning; Do corresponds to organisation and implementation; Check to monitoring and evaluation; and Act to feedback and continuous improvement. This structure gives the mechanism a cyclical and self-regulating nature, whereby the outcomes of one managerial sequence become the

basis for subsequent interventions. *The digital dimension and risk management are integrated transversally* throughout the mechanism [5; 15; 17; 26].

The relationship between the eight areas and the five macroprocesses constitutes a distinctive element of the Model's architecture: *the areas define the domains in which quality management is exercised, while the macroprocesses determine how interventions are diagnosed, planned, organised, implemented, monitored, evaluated and improved*. This distinction enables a common managerial logic to be applied across different areas of responsibility, while adapting interventions to the specific characteristics of each area.

The methodological operationalisation of the Model was supported by the development of a functional system of managerial instruments designed to translate processes into activities, procedures, decisions and professional outputs applicable at OLSDÎ level. The substantiation of this system was based on the need to align the instruments with managerial functions, contextual specificities and the information required for decision-making [10; 15; 26].

The instruments were organised into *four functional categories*, corresponding to the logic of the PDCA cycle: diagnosis, forecasting and planning instruments – **Plan**; organisation, implementation, coordination and support instruments – **Do**; monitoring and evaluation instruments – **Check**; and feedback, corrective action and continuous improvement instruments – **Act**. This classification is functional rather than rigid, as the same instrument may support several managerial processes, depending on its intended purpose and the information it generates. *The value of the system of instruments lies not in the number of documents or procedures developed, but in its capacity to ensure traceability between data, problems and needs, priorities, objectives, interventions, indicators, outcomes, feedback and improvement measures*. Templates for the main managerial instruments are presented in Appendix 6 of the thesis [26].

Overall, the findings of Chapter 2 substantiate *the functional relationship between the institutional responsibilities of OLSDÎ, the Managerial Model, its operationalisation mechanism, specialists' competence and the system of managerial instruments*. The Model establishes the conceptual and functional architecture; the quality assurance areas define the domains of intervention; the mechanism establishes the process-based logic; the instruments support its translation into practice; and specialists' competence constitutes the professional-managerial resource necessary for applying the framework as a whole.

These findings substantiate the conceptual and constructive components of the research hypothesis and establish the methodological framework required for the operationalisation and empirical evaluation, in Chapter 3, of the quality management competence of OLSDÎ specialists and the training approach designed to develop it.

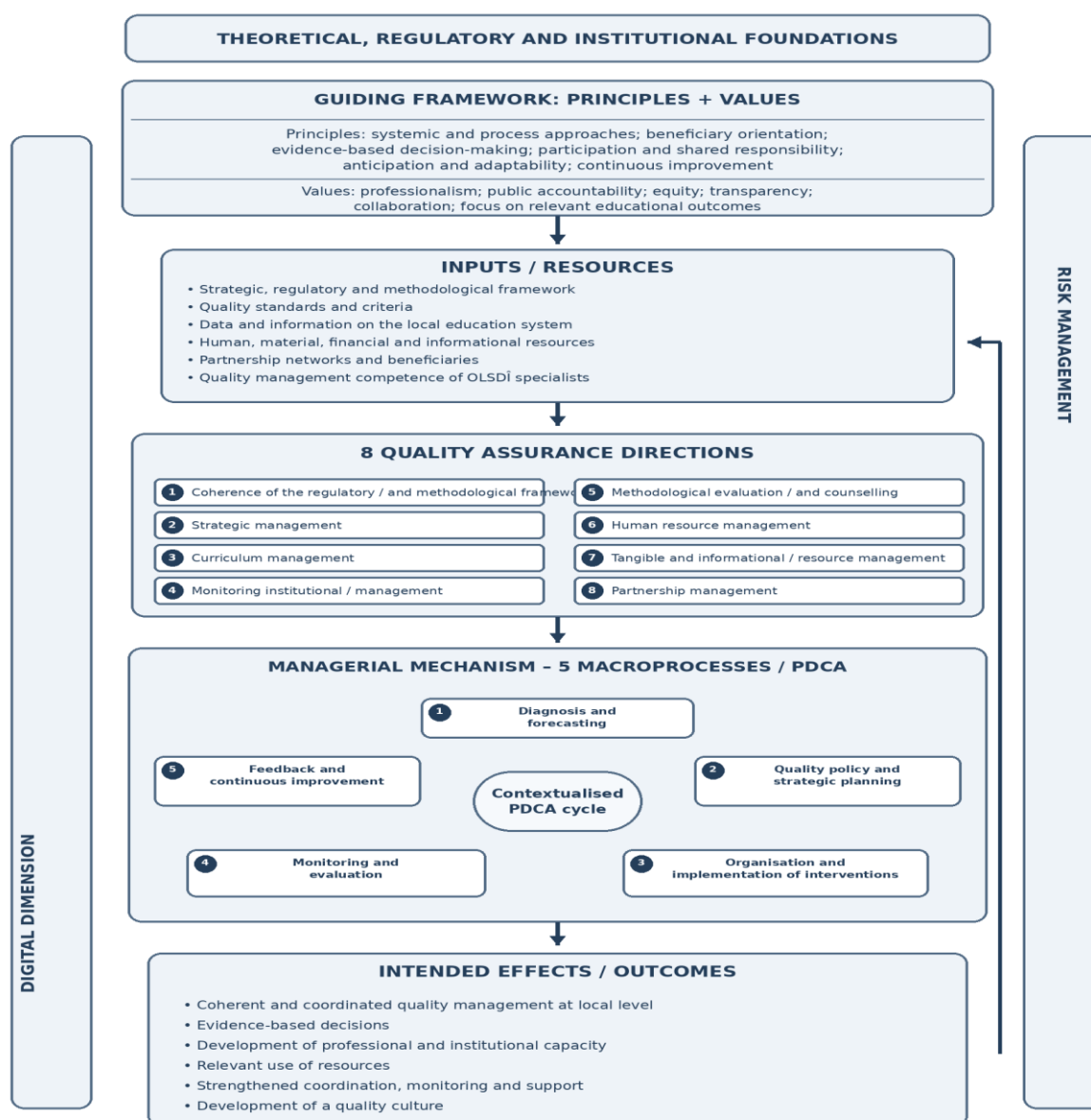


Figure 1. Managerial Model for Quality Assurance in General Education by OLSĐÎ

Chapter 3, “*Experimental Validation of the Training Approach for Developing the Quality Management Competence of OLSĐÎ Specialists*”, presents the empirical approach to diagnosing, developing and assessing the quality management competence of OLSĐÎ specialists, designed in continuity with the theoretical and methodological foundations and the Managerial Model developed in the preceding chapters. The research comprised a pre-experimental study aimed at identifying the functioning of quality management processes at the local level and a pedagogical experiment designed to assess the development of specialists’ competence following their participation in a training programme.

The pre-experimental study was conducted with a sample of 141 OLSĐÎ specialists from 35 districts and municipalities of the Republic of Moldova, including the Autonomous Territorial Unit of Gagauzia, using a semi-structured questionnaire developed on the basis of the Reference Framework for Quality Assurance in General Education by OLSĐÎ, which had previously been

substantiated and applied in the research. The instrument comprised 46 structured items rated on a five-point Likert scale and two open-ended items. The data were examined using descriptive statistics and content analysis [9; 23; 24].

The results revealed *the uneven and insufficiently integrated functioning of quality management processes at the local level*. In the area of quality assurance policies, 86.5% of respondents rated the functioning of the system at a moderate level, while 13.5% assessed it negatively. Only 26.9% positively assessed the consistency and continuity of curriculum monitoring, whereas 44.7% considered the evaluation of the impact of continuing professional development to be insufficient. More pronounced weaknesses were identified in information management and transparency: 50.3% of respondents considered information management inadequate, while 53.9% gave an unfavourable assessment of the transparency strategy and action plan. Furthermore, 65.3% considered the feedback collection mechanism insufficient, and 51.8% assessed performance analysis based on key indicators as inadequate.

The synthesis of the results indicated that the difficulties stemmed not exclusively from the absence of procedures or instruments, but also from *the capacity to integrate and use them coherently within the management cycle*. These findings provided an empirical basis for further developing the Managerial Model and directing the research towards *the professional capacity of specialists* to undertake diagnosis, planning, monitoring, evaluation and continuous quality improvement [23; 24].

The pedagogical experiment aimed to assess changes in the quality management competence of OLSDĠ specialists before and after participation in a methodologically substantiated training intervention. The research was conducted in 2025 at the National Institute for Education and Leadership, involving *120 OLSDĠ specialists* in a single-group, within-subjects PRE–POST design. The experiment comprised three consecutive stages: baseline assessment, training and post-training assessment.

To assess competence, the *Quality Management Competence Assessment Reference Framework for OLSDĠ Specialists* was developed, distinct from the Reference Framework used in the pre-experimental study. It operationalised the four conceptual components of competence – conceptual-normative, processual-managerial, analytical-decisional and axiological-relational – into *seven competence units and 21 assessment indicators*, with three indicators for each unit and the digital dimension integrated transversally. The structure of the Reference Framework ensured that the assessment was aligned with professional situations and requirements specific to OLSDĠ activities.

The assessment employed an ordinal scale ranging from 0 to 3 points for each indicator, with the score for each competence unit calculated as the median of its three corresponding indicators. The overall score, obtained by summing the scores of the seven competence units, ranged from 0 to 21 points and was classified into four levels: N I – Advanced (16–21 points), N II – Functional (11–15 points), N III – Developing (6–10 points) and N IV – Insufficient (0–5 points). The Reference Framework provided a common methodological basis for the initial assessment, the design of the Training Programme and the post-training assessment [8].

Table 1. Summary Structure of the Quality Management Competence Assessment Reference Framework for OLSDĬ Specialists

Source: Developed by the author based on the Quality Management Competence Reference Framework used in the experimental research.

Competence Unit	Assessment Indicators	Key Performance Descriptors
UC1. Applying the Theoretical Foundations of Quality Management	1. Correctly applies fundamental concepts of quality management in education. 2. Explains the role of quality management principles, including beneficiary orientation, data-informed decision-making and continuous improvement. 3. Justifies the relevance of quality management models and frameworks (ISO, EFQM, CAF, PDCA) to OLSDĬ activities.	Conceptual accuracy and depth; logical coherence of responses; relevance of arguments; ability to contextualise concepts within OLSDĬ activities.
UC2. Diagnosis and Forecasting of Educational Quality	4. Identifies quality assurance problems based on available data and information. 5. Applies relevant analytical methods to diagnose educational quality, using indicators, comparisons, causal analysis and risk analysis. 6. Develops short- and medium-term development and intervention scenarios based on diagnostic findings.	Methodological accuracy; coherence of analysis; differentiation between causes and effects; effective use of data; evidence-based justification of solutions and scenarios.
UC3. Strategic and Operational Quality Planning	7. Formulates clear and measurable objectives for quality assurance interventions. 8. Proposes actions aligned with identified problems, objectives and intended outcomes. 9. Aligns the necessary resources and responsibilities with planned objectives and actions.	Consistency and coherence of planning; clarity of objectives; alignment between objectives, actions, resources and responsibilities; practical applicability of the plan.
UC4. Quality Monitoring and Evaluation	10. Selects appropriate indicators for monitoring relevant processes and outcomes. 11. Selects and uses monitoring and evaluation instruments appropriate to the purpose and process being examined. 12. Collects, analyses and interprets information obtained through monitoring and evaluation.	Relevance of indicators and instruments; methodological accuracy; analytical and interpretative ability; coherence of evaluative conclusions.
UC5. Using Data to Inform Decision-Making and Ensure Transparency	13. Draws relevant conclusions for process improvement based on the data analysed. 14. Uses data and evidence to prioritise interventions and inform decisions. 15. Communicates results and conclusions clearly and accessibly to relevant stakeholders.	Relevance and justification of decisions; ability to prioritise; clarity of reasoning; appropriate interpretation and communication of information.
UC6. Leadership and Collaboration in Quality Management	16. Facilitates collaboration with educational institutions and relevant partners in quality management processes. 17. Uses feedback as a resource for adjusting and improving processes. 18. Demonstrates participatory leadership by involving relevant stakeholders in problem analysis, decision-making and the implementation of improvement actions.	Clarity of communication; ability to engage and coordinate stakeholders; constructive use of feedback; responsibility and shared ownership of decisions.
UC7. Continuous Improvement through the Application of the PDCA Cycle and the Integration of Risk Management	19. Coherently applies the PDCA cycle to analyse and improve a process relevant to OLSDĬ activities. 20. Identifies risks associated with the process under examination and proposes measures to prevent or mitigate them. 21. Proposes actions for adjustment, review and organisational learning based on monitoring, evaluation and feedback findings.	Coherence in applying the PDCA cycle; integration of risks into decision-making; originality and relevance of solutions; feasibility of improvement measures.

The initial assessment revealed that competence was insufficiently developed. Of the 120 participants, 53 (44.2%) were classified at N III and another 53 (44.2%) at N IV, while 14 (11.7%) were classified at N II. No participants reached N I. Thus, 88.3% of participants were placed within the two lowest competence levels. The analysis by competence unit revealed more pronounced weaknesses in the application of the PDCA cycle and integration of risk management, the use of data for decision-making and transparency, and monitoring and evaluation. The findings highlighted the need to develop competence across all its components, with differentiated emphasis on the areas in which competence was insufficiently developed.

The Training Programme was designed by aligning the findings of the initial assessment with the competence structure and the foundations of the Managerial Model developed in Chapter 2. The seven competence units formed the curricular framework of the intervention, with specific learning outcomes, content and professional outputs established for each unit to enable participants to apply their acquired knowledge and skills in situations relevant to OLSDĠ activities [18].

Table 2. Structure of the Quality Management Competence Training Programme

Source: developed by the author.

Competence unit	Training outcome	Main content	Training output
Application of the theoretical foundations of quality management	Reasoned application of quality management concepts and principles	Fundamental concepts; principles; quality frameworks and models; contextualisation	Evidence-based analysis of a professional situation from a quality management perspective
Diagnosis and forecasting of education quality	Identification of problems, causes, trends and risks on the basis of data	Indicators; data analysis; causal analysis; trends; scenarios; risks	Diagnosis of a problem and intervention scenario
Strategic and operational quality planning	Translation of diagnosis into coherent objectives, outcomes and interventions	Objectives; outcomes; indicators; activities; resources; responsibilities	Intervention matrix/plan
Quality monitoring and evaluation	Tracking progress and interpreting results to support corrective action	Indicators; monitoring tools; evaluation of outcomes; findings and evaluative conclusions	Monitoring instrument/plan and evaluation conclusions
Use of data to substantiate decisions and ensure transparency	Evidence-based decision-making and communication of results	Selection, verification, analysis, interpretation, visualisation and communication of data	Data synthesis/visualisation and substantiated decision
Leadership and collaboration in quality management	Participatory coordination and development of collaborative relationships	Leadership; communication; shared responsibility; collaboration; feedback	Collaboration and feedback mechanism/plan
Continuous improvement through application of the PDCA cycle and integration of risk management	Integration of results into a cyclical process of adjustment and development	PDCA; risk management; feedback; preventive and corrective actions	PDCA-based improvement plan

The methodological strategy incorporated *action learning, problem-based learning, case studies, data and evidence analysis, simulation, collaborative learning, professional reflection and formative feedback*.

The comparative PRE–POST assessment was conducted using the same Competence Assessment Reference Framework with the same 120 participants. Descriptive analysis revealed increases in scores across all seven competence units, with mean differences ranging from +0.79 to +0.93 points on the 0–3 scale. In all cases, the median increased from 1 to 2, indicating a shift in the centre of the distribution from N III – Developing to N II – Functional.

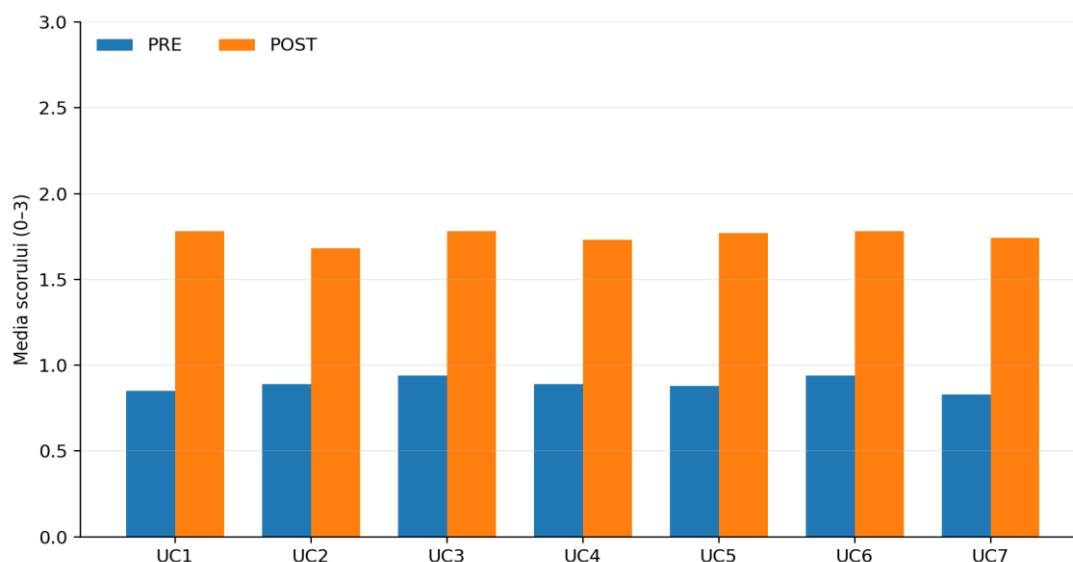


Figure 2. Evolution of PRE–POST mean scores for the seven competence units

Source: developed by the author based on experimental data.

The data presented in Figure 2 demonstrate a positive and consistent increase in mean scores across all seven competence units. The largest descriptive increases were recorded in applying the theoretical foundations of quality management (+0.93), continuous improvement through the application of the PDCA cycle and the integration of risk management (+0.91), and using data to inform decision-making and ensure transparency (+0.89). The improvements in the latter two competence units are particularly relevant, as they exhibited pronounced weaknesses in the initial assessment. The increase in mean scores across all units, together with the shift in the median from 1 to 2, indicates that competence development occurred across all assessed areas rather than being confined to a single domain.

At the overall level, **the mean competence score increased from 6.23 to 12.26 points out of a maximum of 21**, while the median increased from 6.00 to 12.50 points. These changes were also reflected in the redistribution of participants across competence levels, as presented in Table 3.

Table 3. Distribution of Overall Quality Management Competence Levels at PRE and POST Assessment

Competence Level	PRE n	PRE %	POST n	POST %
N I – Advanced	0	0.0%	23	19.2%
N II – Functional	14	11.7%	57	47.5%
N III – Developing	53	44.2%	36	30.0%
N IV – Insufficient	53	44.2%	4	3.3%
Total	120	100%	120	100%

Following the training intervention, 66.7% of participants were classified at competence levels *N I* and *N II*, compared with 11.7% at the PRE assessment stage, while the proportion of participants at *N IV* decreased from 44.2% to 3.3%. The within-subjects design also enabled the examination of individual progression: 115 participants (95.8%) advanced to a higher overall competence level, five (4.2%) remained at the same level, and no participants moved to a lower level. Furthermore, all 120 participants achieved a higher overall competence score at POST than at PRE, including those whose competence level classification remained unchanged.

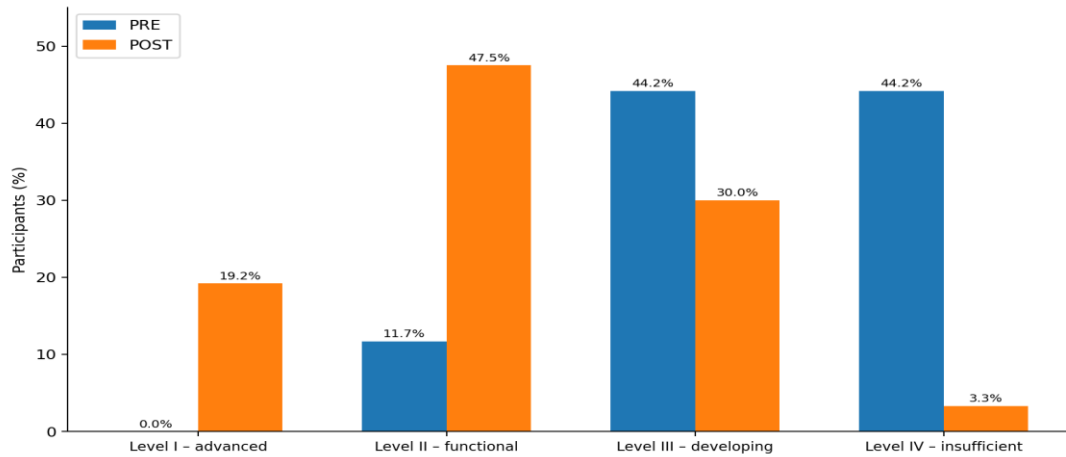


Figure 3. Distribution of overall quality management competence levels at PRE and POST

Source: developed by the author based on experimental data.

Qualitative Analysis of the post-training responses and the outputs produced during the Training Programme complemented the interpretation of the quantitative results. The examples examined illustrated a more structured use of data in identifying problems and prioritising interventions, distinguishing diagnosis from forecasting, aligning objectives with indicators and resources, differentiating monitoring from evaluation, engaging stakeholders, and applying the PDCA cycle to design corrective and improvement measures. This evidence provided context for interpreting the PRE–POST scores and illustrated specific ways in which competence was demonstrated. However, it did not constitute an independent measurement or an additional test of the intervention outcomes. Its interpretation was guided by the indicators and descriptors of the Competence Assessment Reference Framework.

Inferential Analysis aimed to determine the statistical significance of the PRE–POST differences using the non-parametric Wilcoxon signed-rank test for paired samples, appropriate for the ordinal nature of the data and the repeated-measures design. Data were analysed using IBM SPSS Statistics, version 29, and statistical significance was supplemented by the estimation of effect size [8].

Table 4. Wilcoxon Signed-Rank Test Results for the PRE–POST Comparison of the Seven Competence Units and the Overall Competence Score (N = 120)

Source: Developed by the author based on experimental data analysed using IBM SPSS Statistics.

Variable Analysed	Positive Ranks POST > PRE	Negative Ranks POST < PRE	Ties	Z	p	r
UC1. Applying the Theoretical Foundations of Quality Management	92	0	28	−8.881	<0.001	0.811
UC2. Diagnosis and Forecasting of Educational Quality	87	0	33	−8.969	<0.001	0.819
UC3. Strategic and Operational Quality Planning	82	0	38	−8.358	<0.001	0.763
UC4. Quality Monitoring and Evaluation	94	0	26	−9.424	<0.001	0.860
UC5. Using Data to Inform Decision-Making and Ensure Transparency	106	0	14	−10.249	<0.001	0.936
UC6. Leadership and Collaboration in Quality Management	94	0	26	−9.424	<0.001	0.860
UC7. Continuous Improvement through the Application of the PDCA Cycle and the Integration of Risk Management	103	0	17	−9.886	<0.001	0.902
Overall Competence Score	120	0	0	−9.569	<0.001	0.874

Note: The Z and p values, as well as the positive ranks, negative ranks and ties, were obtained using the Wilcoxon signed-rank test in IBM SPSS Statistics 29. Effect size was estimated using the coefficient r, calculated as the absolute value of the Z statistic divided by the square root of the total number of observations (N = 120).

The inferential analysis, conducted using the Wilcoxon signed-rank test for paired samples, revealed *statistically significant differences between PRE and POST assessments across all seven competence units and the overall competence score* ($p < 0.001$), associated with large effect sizes. The highest values of the effect size coefficient r were recorded for using data to inform decision-making and ensure transparency ($r = 0.936$) and continuous improvement through the application of the PDCA cycle and the integration of risk management ($r = 0.902$), both of which exhibited pronounced weaknesses at the initial assessment. For the overall competence score, the difference was statistically significant ($Z = -9.569$; $p < 0.001$; $r = 0.874$), and the results remained statistically significant after applying the Bonferroni correction for multiple comparisons ($\alpha = 0.00625$). The convergence of descriptive and inferential analyses indicates a positive and consistent development of competence over the period investigated.

The complementary analyses did not identify *professional experience as a factor systematically associated* with initial competence levels, post-training competence levels or overall progress, as the Spearman correlation coefficients were not statistically significant. Professional position did not significantly differentiate the overall PRE and POST scores either. Although the Kruskal–Wallis test

indicated a statistically significant difference in overall progress ($H(4) = 10.544$; $p = 0.032$), the effect size was small ($\epsilon^2 = 0.057$), and the post-hoc pairwise comparisons adjusted using the Holm procedure did not identify statistically significant differences between pairs. Therefore, the findings do not support a systematic differentiation in competence development according to professional position, with positive progress observed across the sample investigated.

The synthesis of the findings supports *the functional coherence of the relationship between the Managerial Model, quality management competence, the Competence Assessment Reference Framework, the Training Programme and the PRE–POST assessment*. The Model establishes the managerial framework and its operational mechanism; specialists' competence constitutes a professional-managerial resource necessary for their application; the Reference Framework enables the operationalisation of competence; and the Training Programme provides opportunities for its development and application. In relation to the research hypothesis, the findings provide *empirical support for its training-related component*, demonstrating an association between OLSDÎ specialists' participation in a methodologically substantiated training intervention and a positive, statistically significant and consistent development of quality management competence.

The interpretation of the findings is limited by *the single-group, within-subjects PRE–POST design*, without an independent control group, which does not allow the observed progress to be attributed exclusively to the Training Programme. Furthermore, the short interval between the completion of the intervention and the post-training assessment does not allow conclusions to be drawn regarding the long-term retention of acquired competences or their transfer into organisational practice. Overall, the findings of Chapter 3, supported by the convergence of descriptive and inferential analyses and complemented by illustrative qualitative evidence, demonstrate the relevance of the integrated approach to diagnosis, training and assessment and substantiate the role of OLSDÎ specialists' competence as *a necessary professional-managerial condition for applying the Managerial Model*, without **constituting experimental validation of its systemic effects on educational quality**.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

The research aimed to provide a theoretical and praxeological foundation for quality management in general education at the local level and to develop a managerial solution adapted to the responsibilities of the Local Specialised Authority in the Domain of Education (OLSDÎ). The synthesis of the findings from the theoretical and comparative analysis, the regulatory and institutional framework, the managerial modelling process, and the empirical and experimental research supports the formulation of the following general conclusions:

1. The theoretical, methodological and comparative analysis of quality management, relevant models and reference frameworks, and international experiences enabled the identification of foundations relevant to OLSDÎ: *systemic and process-based approaches, beneficiary orientation, leadership and quality culture, data- and evidence-informed management, development-oriented evaluation and continuous improvement*. The analysis of the regulatory and institutional framework revealed the existence of explicit responsibilities assigned to OLSDÎ, alongside their insufficient integration into a coherent managerial framework. The pre-experimental study involving 141 OLSDÎ specialists identified, from the respondents' perspectives, perceived inconsistencies and weaknesses in the functioning of quality management processes, providing an empirical basis for further developing the managerial solution and its competence-related component [23; 24].
2. The quality management competence of OLSDÎ specialists in general education was conceptualised as an integrative professional-managerial construct comprising four components: *conceptual-normative, processual-managerial, analytical-decisional and axiological-relational, with the digital dimension integrated transversally*. For the purposes of diagnosis, training and assessment, the competence was operationalised through seven competence units, 21 indicators and corresponding descriptors, incorporated into the Competence Assessment Reference Framework developed within the research.
3. The Managerial Model for Quality Assurance in General Education at OLSDÎ level was developed as an open, dynamic and integrative system that brings together theoretical, regulatory and axiological foundations, resources, specialists' competence, eight interdependent areas of quality assurance, the managerial mechanism, outcomes and feedback connections. The identification of the eight areas enabled a distinction to be made between the specific domains of intervention and quality management in general education as an overarching managerial logic [22; 25].
4. The managerial mechanism for operationalising the Model was configured through five interdependent macroprocesses – *diagnosis and forecasting; policy development and strategic quality planning; organisation and implementation of interventions; monitoring and evaluation; and feedback and continuous improvement* – contextualised within the logic of the PDCA cycle. Risk management and the digital dimension were integrated transversally. To support the methodological operationalisation of the Model, a functional system of managerial instruments was developed, aligned with these processes and designed to ensure coherence between data,

problems and needs, priorities, objectives, interventions, indicators, outcomes, feedback and improvement measures [26].

5. The Training Programme and action-oriented training approach, developed in alignment with the competence structure, the Competence Assessment Reference Framework, the managerial mechanism and the identified training needs, were implemented and evaluated using a within-subjects PRE–POST design involving 120 OLSDÎ specialists. The results demonstrated positive and statistically significant development across all seven competence units and in the overall competence score, with 115 participants (95.8%) progressing to a higher overall competence level. These findings support the relevance of the methodological framework for diagnosis, training and assessment, as well as the role of competence as a necessary professional-managerial condition for applying the Model, without constituting a direct measurement of its systemic effects on the quality of general education [26].

Limitations of the Research. The limitations arise from the use of a single-group, within-subjects PRE–POST design, the absence of a control group and the administration of the post-training assessment shortly after completion of the intervention. Consequently, the long-term retention of acquired competences, their transfer into organisational practice and the systemic effects of implementing the Model on educational processes and outcomes cannot yet be determined.

RECOMMENDATIONS

R1. For the Ministry of Education and Research (MEC) – To consider the Managerial Model as a methodological reference for quality management at the local level, through piloting in different territorial contexts and evaluating the conditions for its application before any potential nationwide implementation.

R2. For MEC and the National Institute for Education and Leadership (INEL) – To develop a competence profile for OLSDÎ specialists responsible for quality management and integrate the four competence components and seven competence units operationalised through the Reference Framework into professional development programmes.

R3. For OLSDÎ – To organise quality management through an integrated mechanism encompassing diagnosis and forecasting, planning, organisation and implementation, monitoring and evaluation, feedback and continuous improvement, applied in a differentiated manner across the eight areas of quality assurance.

R4. For OLSDÎ and Educational Institutions – To strengthen data-informed management through standardised procedures for collecting, verifying, analysing and communicating information; using evaluation findings to inform decisions and interventions; integrating digital instruments effectively; and observing ethical principles in the use of data.

R5. For Monitoring and Methodological Support Activities – To strengthen the cycle of monitoring, analysis, feedback, guidance and support, and follow-up on the implementation of recommendations, while distinguishing OLSDÎ responsibilities from formal external evaluation conducted by authorised bodies.

R6. For Quality Management at the Local Level – To integrate risk management transversally into managerial processes by identifying vulnerabilities, assessing probability and impact, establishing preventive and corrective measures, and periodically reassessing risks.

R7. For the Professional Development of OLSDI Specialists – To use the Training Programme and Competence Assessment Reference Framework to diagnose training needs and design differentiated professional development pathways, with particular emphasis on data-informed management, monitoring and evaluation, PDCA, collaborative leadership and risk management.

R8. For Future Research – To investigate the Model in diverse territorial contexts using research designs incorporating comparison or control groups and longitudinal assessments, in order to evaluate the transfer of competences into professional practice and the effects of Model implementation on organisational processes and educational quality indicators.

R9. For the Territorial Education Agencies (ATE) – To apply and adapt the foundations of the Managerial Model, its mechanism and the instruments developed within the research to the responsibilities and regulatory, functional and organisational framework of the newly established structures.

BIBLIOGRAPHY

1. ANDRIȚCHI, V. Managementul calității în domeniul resurselor umane. În: *Univers Pedagogic*. 2011, nr. 1, pp. 87–94. ISSN 1811-5470.
2. BACIU, S. Paradigma managementului calității în instituțiile de învățământ superior. Chișinău: ASEM, 2014. ISBN 978-9975-75-690-7.
3. BUNDESMINISTERIUM FÜR BILDUNG, WISSENSCHAFT UND FORSCHUNG (BMBWF). Qualitätsmanagement Schule (QMS): Das nationale Qualitätsmanagementsystem für Schulen in Österreich. Wien, 2021.
4. COJOCARU, V. Gh. Competență, Performanță, Calitate. Concepte și aplicații în educație. Chișinău: Tipografia UPS „Ion Creangă”, 2016. ISBN 978-9975-46-281-5.
5. DEMING, W. E. *Out of the Crisis*. Cambridge, MA: MIT Press, 1986.
6. EUROPEAN FOUNDATION FOR QUALITY MANAGEMENT (EFQM). The EFQM Model 2025 [online]. Brussels: EFQM, 2025 [citat 13.08.2026]. Disponibil: <https://efqm.org/the-efqm-model/>
7. EUROPEAN INSTITUTE OF PUBLIC ADMINISTRATION (EIPA). CAF 2020 – The Common Assessment Framework: Improving Public Organisations through Self-Assessment. Maastricht: EIPA, 2020. Disponibil: <https://www.eupan.eu/caf/>
8. DOMAIN, A. *Discovering Statistics Using IBM SPSS Statistics*. 6th ed. London: SAGE Publications, 2024.
9. GUȚU, V. Cadrul de referință al managementului educațional în Republica Moldova: indicatori și descriptori. Chișinău: USM, 2012.
10. GUȚU, V. Sistemul de asigurare a calității în învățământul primar și secundar general la nivel local. Chișinău: USM, 2012. ISBN 978-9975-71-319-1.
11. GUVERNUL REPUBLICII MOLDOVA. Hotărârea Guvernului nr. 114 din 7 martie 2023 cu privire la aprobarea Strategiei de dezvoltare „Educația 2030” și a Programului de implementare a acesteia pentru anii 2023–2025.
12. GUVERNUL REPUBLICII MOLDOVA. Hotărârea Guvernului nr. 330 din 31 mai 2023 cu privire la aprobarea Cadrului Național al Calificărilor. În: *Monitorul Oficial al Republicii Moldova*. 2023, nr. 237–239, art. 579.
13. GUVERNUL REPUBLICII MOLDOVA. Hotărârea Guvernului nr. 404 din 16 iunie 2015 cu privire la aprobarea Regulamentului-cadru de organizare și funcționare a organului local de specialitate în domeniul învățământului și a structurii-tip a acestuia.
14. HARVEY, L.; GREEN, D. Defining quality. În: *Assessment & Evaluation in Higher Education*. 1993, 18(1), pp. 9–34. DOI 10.1080/0260293930180102.
15. INTERNATIONAL ORGANIZATION FOR STANDARDIZATION. ISO 21001:2025. Educational organizations — Management systems for educational organizations — Requirements with guidance for use. 2nd ed. Geneva: ISO, 2025.
16. IOSIFESCU, Ș. Calitatea educației: concept, principii, metodologii. București: Editura 2000+ Consulting, 2008.
17. JURAN, J. M. The Quality Trilogy. În: *Quality Progress*. 1986, vol. 19, nr. 8, pp. 19–24.

18. KNOWLES, M. S.; HOLTON III, E. F.; SWANSON, R. A.; ROBINSON, P. A. *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*. 9th ed. Routledge, 2020.
19. MINISTERUL EDUCAȚIEI ȘI CERCETĂRII AL REPUBLICII MOLDOVA. Instrucțiunea privind organizarea și desfășurarea procesului de monitorizare și asistență metodologică externă în învățământul primar și secundar, ciclurile I și II, aprobată prin Ordinul nr. 89 din 23.01.2025.
20. MINISTRY OF EDUCATION AND RESEARCH OF ESTONIA. HaridusSilm – Smart Decisions with Haridussilm [online]. [cit. 15.08.2026]. Disponibil: <https://haridussilm.ee/en>
21. PARLAMENTUL REPUBLICII MOLDOVA. Codul educației al Republicii Moldova nr. 152 din 17 iulie 2014, cu modificările ulterioare.
22. POPA, V. Direcții de asigurare a calității în educație la nivelul Organului Local de Specialitate în Domeniul Învățământului. În: *Învățământul superior: tradiții, valori, perspective: conferință științifică internațională*, Chișinău, 29–30 septembrie 2023. Chișinău, 2023, pp. 123–136. ISBN 978-9975-46-816-9.
23. POPA, V. Managementul calității educației la nivel local. În: ANDRIȚCHI, V.; ȚÎBULEAC, A., coord.; VERDEȘ, T. et al. *Monitorizarea implementării curriculumului la limba engleză: Ghid metodologic*. Chișinău: [S. n.], 2024 (Print-Caro), pp. 100–107. ISBN 978-5-85748-009-0; ISBN 978-5-85748-010-6 (PDF).
24. POPA, V. Valorile experimentale ale managementului calității în educație la nivel local. În: *Kreatikon: Creativitate–Formare–Performanță. „Creativitate și inovare – premise ale excelenței în educație”*, Iași, 25–26 aprilie 2026, pp. 303–308. ISSN 2068-1372.
25. POPA, V.; ANDRIȚCHI, V. Asigurarea calității în educație la nivelul organului local de specialitate în domeniul învățământului: fundamentarea unui model managerial. În: *Univers Pedagogic*. 2026, nr. 2(90), pp. 60–69. ISSN 1811-5470. DOI 10.52387/1811-5470.2026.2.10.
26. POPA, V.; ANDRIȚCHI, V. Quality management instruments in local structures for the administration of general education in the Republic of Moldova: an integrative conceptual model based on the PDCA cycle. În: *Euromentor. Studii despre educație*. București, 2026, nr 3, pp. 135-159. ISSN 2067-7839; e-ISSN 2247-9376; ISSN-L 2068-780X.
27. SALLIS, E. *Total Quality Management in Education*. 3rd ed. London: Kogan Page, 2002.

LIST OF THE AUTHOR'S PUBLICATIONS ON THE THESIS TOPIC

Articles in Scientific Journals

1. POPA, V. Aspecte teoretice ale asigurării calității educației la nivel local. În: *Acta et Commentationes*, seria Științe ale Educației. 2022, nr. 2(28), pp. 153–163. ISSN 1857-0623. DOI 10.36120/2587-3636.v28i2.153-163.
2. POPA, V. Quality management models in education at the Local Specialized Authority in the Domain of Education: comparative analysis and proposal of an integrated model for the Republic of Moldova. În: *Studia Universitatis Moldaviae*, seria Științe ale Educației. 2026, nr. 5(195), pp. 191–201. ISSN 1857-2103. DOI 10.59295/sum5(195)2026_21.
3. POPA, V.; ANDRIȚCHI, V. Asigurarea calității în educație la nivelul organului local de specialitate în domeniul învățământului: fundamentarea unui model managerial. În: *Univers Pedagogic*. 2026, nr. 2(90), pp. 60–69. ISSN 1811-5470. DOI 10.52387/1811-5470.2026.2.10.
4. POPA, V.; ANDRIȚCHI, V. Quality management instruments in local structures for the administration of general education in the Republic of Moldova: an integrative conceptual model based on the PDCA cycle. În: *Euromentor. Studii despre educație*. București, 2026. ISSN 2067-7839; e-ISSN 2247-9376; ISSN-L 2068-780X.

Articles and Papers Published in Conference Proceedings

1. POPA, V. Aspecte ale managementului calității educației la nivel local. În: *Adaptarea sistemului educațional la noile abordări din societatea contemporană: provocări și soluții: conferință științifică internațională*, Chișinău, 18–19 august 2022. Chișinău: [S. n.], 2023 (Tipografia UST), pp. 228–236. ISBN 978-9975-76-417-9 (PDF).
2. POPA, V. Aspecte practice ale managementului calității educației la nivel local. În: *Conferința științifică studențească cu participare internațională*, ed. a LXXI-a, Universitatea de Stat din Tiraspol, 20 aprilie 2022. Chișinău, 2022, pp. 441–447. ISBN 978-9975-76-394-3.
3. POPA, V. Calitate în educație la nivel local prin implementarea tehnologiilor inovative. În: *Cercetare–Inovare–Antreprenoriat inovativ: Congres internațional*, 13–14 octombrie 2023. Chișinău, 2023, pp. 189–196. ISBN 978-9975-46-831-2.
4. POPA, V. Direcții de asigurare a calității în educație la nivelul Organului Local de Specialitate în Domeniul Învățământului. În: *Învățământul superior: tradiții, valori, perspective: conferință științifică internațională*, Chișinău, 29–30 septembrie 2023. Chișinău, 2023, pp. 123–136. ISBN 978-9975-46-816-9.
5. POPA, V. Formarea continuă a specialiștilor din OLSDÎ – premisă pentru asigurarea calității la nivel local. În: *Știință și educație: noi abordări și perspective: conferință științifică internațională*, 24–25 martie 2023, seria 25, vol. 2. Chișinău, 2023, pp. 418–423. ISBN 978-9975-46-783-4.
6. POPA, V. Inserția profesională a cadrelor didactice debutante – element-cheie în asigurarea calității resursei umane la nivel local. În: *Cercetare, inovare, dezvoltare*. Vol. 2. Chișinău: CEP UPSC, 2025, pp. 85–92.
7. POPA, V. Valorile experimentale ale managementului calității în educație la nivel local. În: *Kreatikon: Creativitate–Formare–Performanță. „Creativitate și inovare – premise ale excelenței în educație”*, Iași, 25–26 aprilie 2026, pp. 303–308. ISSN 2068-1372.

Chapter in a Scientific and Methodological Publication

1. POPA, V. Managementul calității educației la nivel local. În: ANDRIȚCHI, V.; ȚÎBULEAC, A., coord.; VERDEȘ, T. et al. *Monitorizarea implementării curriculumului la limba engleză: Ghid metodologic*. Chișinău, 2024 (Print-Caro), pp. 100–107. ISBN 978-5-85748-009-0; ISBN 978-5-85748-010-6 (PDF).

ADNOTARE

POPA Violeta, Modelul managerial de asigurare a calității învățământului general de către Organul Local de Specialitate în Domeniul Învățământului. Teză de doctor în științe ale educației, Chișinău, 2026.

Structura tezei: introducere, trei capitole, concluzii generale și recomandări, bibliografie din 130 de titluri, 10 anexe, 147 de pagini de text de bază, 8 figuri și 31 de tabele. Rezultatele cercetării sunt publicate în 12 lucrări științifice.

Cuvinte-cheie: managementul calității, asigurarea calității, management educațional la nivel local, model managerial, mecanism managerial, competență de management al calității, management bazat pe date, PDCA, îmbunătățire continuă.

Scopul cercetării: Fundamentarea teoretico-metodologică, elaborarea și validarea Modelului managerial de asigurare a calității în învățământul general la nivel local, realizat de către Organul Local de Specialitate în Domeniul Învățământului.

Obiectivele cercetării: analiza și sistematizarea reperelor teoretice, a modelelor, cadrelor și practicilor internaționale relevante; analiza cadrului normativ al asigurării calității în învățământul general și fundamentarea cadrului axiologic și funcțional al managementului calității la nivel local, prin delimitarea sistemului de valori și principii relevante; investigarea empirică și identificarea necesităților relevante pentru dezvoltarea cercetării; elaborarea Modelului managerial de asigurare a calității în învățământul general de către OLSDÎ, a mecanismului și a sistemului de instrumente manageriale; conceptualizarea competenței de management al calității a specialistului OLSDÎ și elaborarea Referențialului de evaluare a nivelului de manifestare a acesteia; elaborarea și implementarea Programului și a demersului acțional de formare a competenței de management al calității învățământului general al specialiștilor din cadrul OLSDÎ.

Noutatea și originalitatea științifice: fundamentarea construcției teoretico-metodologice integrate a managementului calității, adaptată specificului funcțional al OLSDÎ; elaborarea Modelului managerial de asigurare a calității și configurarea mecanismului său de operaționalizare prin cinci macroprocese interdependente, contextualizate în logica PDCA, cu integrarea transversală a dimensiunii digitale și a managementului riscurilor; delimitarea celor opt direcții interdependente de asigurare a calității; conceptualizarea competenței de management al calității a specialistului OLSDÎ; elaborarea Referențialului de evaluare și a cadrului metodologic de formare a competenței; fundamentarea relației funcționale dintre Modelul managerial, mecanismul său de operaționalizare, competența specialistului, Referențial și demersul formativ.

Rezultatele științifice obținute care contribuie la soluționarea problemei științifice importante: a fost fundamentat și elaborat Modelul managerial de asigurare a calității învățământului general la nivelul OLSDÎ, conceput ca sistem deschis, dinamic și integrator, care articulează cadrul teoretic, normativ și axiologic, resursele, competența specialistului, direcțiile de intervenție, mecanismul managerial și conexiunile de feedback; a fost configurat mecanismul managerial prin cinci macroprocese interdependente și a fost structurat sistemul funcțional de instrumente necesar operaționalizării acestuia; a fost conceptualizată competența de management al calității a specialistului OLSDÎ și elaborat Referențialul de evaluare; a fost elaborat, implementat și evaluat demersul formativ destinat dezvoltării competenței de management al calității.

Semnificația teoretică: dezvoltarea cadrului conceptual și metodologic al managementului calității în învățământul general la nivel local prin fundamentarea unei abordări sistemice, procesuale și integratoare adaptate specificului funcțional al OLSDÎ; fundamentarea cadrului axiologic și principal al managementului calității; delimitarea cadrului funcțional prin opt direcții interdependente de intervenție; fundamentarea mecanismului managerial și a caracterului său ciclic și autoreglator; dezvoltarea conceptului de competență de management al calității a specialistului OLSDÎ și explicitarea relației funcționale dintre Modelul managerial, mecanismul de operaționalizare și competența specialistului.

Valoarea aplicativă: Modelul managerial și mecanismul său de operaționalizare, care pot constitui repere metodologice pentru organizarea managementului calității la nivel local; Referențialul de evaluare a competenței de management al calității; Programul și demersul acțional de formare; sistemul funcțional de instrumente manageriale pentru diagnoză și prognoză, planificare, organizare și implementare, monitorizare și evaluare, fundamentarea deciziilor pe date, feedback și îmbunătățire continuă; precum și cadrul metodologic de evaluare PRE–POST a evoluției competenței profesionale. Rezultatele cercetării oferă repere pentru dezvoltarea profesională a specialiștilor și pentru organizarea coerentă a proceselor de management al calității la nivel local.

Implementarea rezultatelor științifice: rezultatele cercetării au fost valorificate prin studiul empiric preexperimental realizat cu participarea a 141 de specialiști OLSDÎ din 35 de raioane/municipii, inclusiv UTA Găgăuzia, și prin implementarea, pe parcursul a opt săptămâni, a Programului de formare cu 120 de specialiști OLSDÎ, evaluați în cadrul unui design intrasubiecți PRE–POST. Demersul a inclus utilizarea Referențialului de evaluare, valorificarea instrumentelor manageriale și elaborarea unor produse formative aplicative. Rezultatele evaluării PRE–POST au evidențiat diferențe statistic semnificative pentru toate cele șapte unități de competență și pentru scorul global, fiind diseminate prin publicații și manifestări științifice naționale și internaționale.

ANNOTATION

POPA Violeta, The Managerial Model for Quality Assurance in General Education by the Local Specialized Authority in the Domain of Education. Doctoral Thesis in Educational Sciences, Chişinău, 2026.

Thesis structure: introduction, three chapters, general conclusions and recommendations, a bibliography comprising 130 references, 10 appendices, 147 pages of main text, 8 figures, and 31 tables. The research findings have been published in 12 scientific publications.

Keywords: quality management, quality assurance, educational management at the local level, managerial model, managerial mechanism, quality management competence, data-driven management, PDCA, continuous improvement.

Research aim: To provide the theoretical and methodological foundations for, develop, and validate the Managerial Model for Quality Assurance in General Education at the local level, implemented by the Local Specialized Authority in the Domain of Education (OLSDÎ).

Research objectives: to analyse and systematise relevant theoretical foundations, models, frameworks, and international practices; to analyse the regulatory framework for quality assurance in general education and establish the axiological and functional foundations of quality management at the local level by identifying the relevant system of values and principles; to conduct an empirical investigation and identify needs relevant to the further development of the research; to develop the Managerial Model for Quality Assurance in General Education by OLSDÎ, together with its managerial mechanism and system of management tools; to conceptualise the quality management competence of OLSDÎ specialists and develop a Reference Framework for Assessing the Level of Demonstration of this Competence; to develop and implement the Training Programme and the action-oriented approach for developing the quality management competence of OLSDÎ specialists in general education.

Scientific novelty and originality: the establishment of an integrated theoretical and methodological framework for quality management adapted to the specific functions of OLSDÎ; the development of the Managerial Model for Quality Assurance and the configuration of its operationalisation mechanism through five interdependent macroprocesses, contextualised within the PDCA cycle, with the digital dimension and risk management integrated as cross-cutting components; the identification of eight interdependent areas of quality assurance; the conceptualisation of the quality management competence of OLSDÎ specialists; the development of the Competence Assessment Reference Framework and the methodological framework for competence development; and the substantiation of the functional relationship between the Managerial Model, its operationalisation mechanism, specialists' competence, the Assessment Reference Framework, and the training approach.

Scientific results obtained that contribute to solving the significant scientific problem: the Managerial Model for Quality Assurance in General Education at the OLSDÎ level was theoretically substantiated and developed as an open, dynamic, and integrated system linking the theoretical, regulatory, and axiological foundations, resources, specialists' competence, areas of intervention, the managerial mechanism, and feedback loops; the managerial mechanism was configured through five interdependent macroprocesses, and a functional system of management tools required for its operationalisation was structured; the quality management competence of OLSDÎ specialists was conceptualised, and the Competence Assessment Reference Framework was developed; and the training approach aimed at developing quality management competence was designed, implemented, and evaluated.

Theoretical significance: the advancement of the conceptual and methodological framework for quality management in general education at the local level through the substantiation of a systemic, process-based, and integrative approach adapted to the specific functions of OLSDÎ; the establishment of the axiological framework and underlying principles of quality management; the definition of the functional framework through eight interdependent areas of intervention; the substantiation of the managerial mechanism and its cyclical and self-regulating nature; the development of the concept of quality management competence of OLSDÎ specialists; and the clarification of the functional relationship between the Managerial Model, its operationalisation mechanism, and specialists' competence.

Practical value: the Managerial Model and its operationalisation mechanism, which may serve as methodological reference points for organising quality management at the local level; the Quality Management Competence Assessment Reference Framework; the Training Programme and the action-oriented training approach; the functional system of management tools for diagnosis and forecasting, planning, organisation and implementation, monitoring and evaluation, data-informed decision-making, feedback, and continuous improvement; and the methodological framework for PRE–POST assessment of professional competence development. The research findings provide reference points for the professional development of specialists and the coherent organisation of quality management processes at the local level.

Implementation of scientific results: the research findings were applied through a pre-experimental empirical study involving 141 OLSDÎ specialists from 35 districts and municipalities, including the Autonomous Territorial Unit of Gagauzia, and through the implementation of an eight-week Training Programme involving 120 OLSDÎ specialists, assessed using a within-subjects PRE–POST design. The approach included the use of the Competence Assessment Reference Framework, the application of management tools, and the development of practical training outputs. The PRE–POST assessment results revealed statistically significant differences across all seven competence units and in the overall score. The findings were disseminated through publications and national and international scientific events.

POPA VIOLETA

**MANAGERIAL MODEL FOR QUALITY ASSURANCE IN GENERAL
EDUCATION BY THE LOCAL SPECIALIZED AUTHORITY IN THE
DOMAIN OF EDUCATION**

531.02. EDUCATIONAL MANAGEMENT

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