

Identifying Factors Influencing Educational Governance in the Secondary Education System: A Qualitative Study Using Meta-Synthesis and Delphi Approaches

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ABSTRACT

Purpose: This study aimed to identify, organize, and validate the factors influencing educational governance in the secondary education system through an integrated qualitative approach based on meta-synthesis and expert consensus.

Methods and Materials: This applied qualitative-exploratory study was conducted in two sequential phases. In the first phase, a systematic meta-synthesis of national and international literature related to educational governance, educational policymaking, decentralization, accountability, educational equity, stakeholder participation, human resources, leadership, and educational financing was performed. Following systematic screening of titles, abstracts, and full texts according to predefined inclusion and exclusion criteria, 31 relevant sources were retained for qualitative analysis. Concepts and findings were extracted, coded, compared, merged, and hierarchically organized into indicators, components, and dimensions. In the second phase, the indicators obtained from the meta-synthesis were evaluated by 18 experts in educational governance and education through a four-round Delphi process. Indicators with mean scores below 4.00 were eliminated, while expert-proposed indicators were reviewed in subsequent rounds. Kendall's coefficient of concordance was used to assess expert consensus.

Findings: Meta-synthesis initially yielded 132 indicators organized into 20 components and five overarching dimensions: structural, policy-related, human, participatory, and economic. During the Delphi process, seven indicators with insufficient expert support were removed, while five new indicators were added based on expert recommendations. The final framework therefore consisted of 130 validated indicators. Expert ratings showed progressive convergence across the Delphi rounds, and Kendall's coefficient exceeded 0.70 in the final rounds, indicating an acceptable and substantial level of consensus.

Conclusion: Educational governance in secondary education is a multidimensional and interdependent construct that requires simultaneous attention to institutional structures, coherent policy implementation, human capacities, stakeholder relationships, accountability, equity, technological adaptation, and sustainable resource management.

Keywords: Educational Governance; Secondary Education; Meta-Synthesis; Delphi Technique; Good Governance; Educational Policy; Educational Management.

1. Introduction

Educational governance has become one of the central concepts in contemporary debates on the quality, effectiveness, equity, and adaptability of education systems. Whereas traditional educational administration was primarily concerned with hierarchical authority, bureaucratic control, formal regulations, and the implementation of centrally defined policies, the concept of governance encompasses a considerably broader set of relationships among governmental institutions, schools, professional actors, families, communities, private organizations, civil society, and increasingly digital and transnational actors. Governance therefore concerns not only who formally possesses authority but also how decisions are formulated, how resources and responsibilities are distributed, how actors participate in decision-making, how accountability is established, and how educational institutions respond to changing social expectations. Recent scholarship accordingly conceptualizes educational governance as a multidimensional field involving institutional arrangements, policy instruments, networks, data infrastructures, professional practices, and mechanisms through which educational priorities are negotiated and implemented (Rodrigues et al., 2025; Wilkins & Mifsud, 2024). From this perspective, improving educational outcomes requires attention not merely to curricula and classroom practices but also to the structures through which educational systems are governed.

The growing importance of governance is closely associated with the transformation of the wider public-sector environment. Contemporary governance frameworks emphasize transparency, responsiveness, accountability, participation, rule of law, institutional effectiveness, inclusiveness, and the capacity to coordinate multiple actors in pursuit of collective goals. These principles are also central to sustainable development because public institutions are expected to combine effectiveness with legitimacy, equitable access, and responsiveness to citizens' needs (Undp, 2024). Within education, such expectations have created pressure to replace exclusively centralized command-and-control structures with governance systems capable of combining national coordination with institutional autonomy, stakeholder participation, professional discretion, and measurable accountability. At the same time, governance cannot simply be equated with decentralization. Redistribution of authority may improve responsiveness and local adaptation only when roles,

responsibilities, accountability mechanisms, and institutional capacities are adequately defined. Consequently, governance reform involves balancing autonomy and coordination rather than merely transferring authority from central to local levels (Dovigo, 2024; Kapelela et al., 2025).

This issue is particularly important in secondary education. Secondary schools operate at a critical intersection between compulsory education, preparation for higher education, vocational and occupational pathways, citizenship formation, and adolescent development. They are consequently exposed to multiple and sometimes competing expectations from ministries, regional authorities, school administrators, teachers, students, parents, universities, labor markets, and local communities. Their performance depends not only on the quality of teaching but also on organizational agility, allocation of authority, professional leadership, infrastructure, human resources, financing, accountability, and relationships with external stakeholders. The need to make secondary education more dynamic and capable of responding to changing technological, cultural, economic, and educational conditions has therefore become an important policy concern (Abbaspour, 2025). Transformational approaches to schooling similarly suggest that schools must move beyond rigid administrative arrangements toward learning environments that are flexible, skills-oriented, responsive to emerging needs, and supported by governance structures capable of institutional transformation (Kalantari & Sourghali, 2024).

One of the most significant developments in educational governance has been the movement from exclusively vertical control toward networked and collaborative forms of coordination. Educational problems increasingly transcend the jurisdiction and capacity of individual schools or administrative units, requiring collaboration among educational authorities, municipalities, social organizations, families, professional communities, and other stakeholders. Systematic studies of network governance have highlighted coordination, interdependence, trust, resource sharing, collaborative decision-making, and horizontal relationships as important components of contemporary education systems (Karimian et al., 2025). Collaborative governance similarly provides mechanisms for mobilizing dispersed expertise and organizational capacities and for creating more participatory approaches to policy implementation (Vahdani et al., 2026). International research has also demonstrated the relevance of horizontal forms of educational governance,

particularly where digital practices and local networks enable educational actors to develop relationships that radiate across institutions rather than simply expanding through centrally controlled structures (Gallagher et al., 2024). Network governance thus changes the school from an isolated administrative unit into a node within a wider educational and social ecosystem.

Nevertheless, decentralization and collaboration introduce their own governance challenges. Decentralized systems may reproduce unequal capacities across localities, create ambiguity regarding responsibility, or intensify political competition over resources and authority. Research on secondary schools under decentralization reforms demonstrates that the formal transfer of responsibilities does not necessarily produce meaningful school autonomy when political structures, resource constraints, and administrative dependencies continue to shape local decision-making (Kapelela et al., 2025). Likewise, tensions between different actors and levels of government may generate conflicts of interest that weaken policy coherence and compromise educational priorities. In the Iranian education system, conflicts of interest have been identified as a significant policymaking challenge whose resolution requires attention to both institutional mechanisms and cultural conditions (Aryafard et al., 2026). Accordingly, effective educational governance requires carefully designed arrangements for distributing authority, managing conflicts, establishing transparent reporting structures, and maintaining coordination between central, regional, and school levels.

Policy coherence is another essential foundation of educational governance. Education systems are frequently governed through a dense combination of laws, strategic documents, regulations, plans, budgetary mechanisms, executive directives, and institutional procedures. When these instruments are inconsistent or disconnected from implementation capacity, policy fragmentation may emerge. Good educational policymaking therefore requires the alignment of policy formulation, evidence, institutional responsibilities, implementation mechanisms, monitoring, and evaluation (Ahmadi et al., 2024). Evidence-based educational policymaking also depends on the ability of governance systems to integrate professional knowledge and empirical evidence into decision processes while recognizing organizational and contextual factors that may facilitate or obstruct implementation (Mohammadi et al., 2024). Within teacher education, governance analysis has similarly shown the importance of examining how policymaking structures influence professional development

and educational quality (Heydari, 2024). These considerations indicate that effective governance cannot be achieved through the production of policy documents alone; it requires institutional mechanisms that translate strategic intentions into executable and assessable practices.

The rule of law and democratic accountability represent equally important dimensions of educational governance. Because education is simultaneously a public service, a social right, and a mechanism for citizenship formation, decisions concerning access, resources, standards, participation, and institutional authority have significant implications for equity and democratic legitimacy. Governance arrangements must therefore protect the rights of students and educational professionals, prevent discriminatory allocation of opportunities, provide mechanisms for accountability, and ensure that institutional decisions operate within transparent legal frameworks. Studies of democratic state education governance demonstrate that the architecture of educational authority has consequences for representation, public accountability, and the relationship between state institutions and citizens (Yeargain, 2024). National evidence likewise suggests that good governance in education requires institutionalization of such principles as transparency, participation, effectiveness, responsiveness, equity, and accountability rather than their treatment as abstract administrative ideals (Pourkarimi & Ghamoushi, 2025). The legitimacy of governance consequently depends on both the effectiveness of educational institutions and the fairness of the processes through which decisions are reached and implemented.

Human resources constitute another fundamental pillar of educational governance. Policies and institutional structures ultimately operate through administrators, school leaders, teachers, counselors, and other educational personnel. Governance quality therefore depends on merit-based appointments, professional competence, ethical behavior, appropriate incentives, opportunities for development, and meaningful involvement of educational professionals in institutional decision-making. Research on human-resource programs in education has emphasized that good governance principles can strengthen the effectiveness of workforce policies by linking competence, accountability, participation, and professional development (Jamali et al., 2025). At the school level, governance is also shaped by the perceptions and interactions of key actors whose roles may not always coincide, highlighting the need for shared understanding, clear responsibility, and effective coordination (Hoang et al., 2024). Furthermore, educational

governance influences how professional identities and expectations are constructed, as governance regimes increasingly define standards, competencies, outcomes, and modes of professional accountability (Pesonen & Valkonen, 2025). Accordingly, the human dimension of governance extends beyond personnel administration to include professional autonomy, well-being, distributed leadership, ethical commitment, and participation.

Accountability itself has also changed in form. Traditional inspection and administrative reporting increasingly coexist with performance indicators, learning outcomes, comparative metrics, digital monitoring, and data-based evaluation. Educational governance is thus progressively mediated by measurable outcomes that influence how institutions and professionals understand quality and responsibility. Research on European educational governance shows that learning outcomes are not merely neutral measures of achievement but are constructed within broader governance arrangements that define expectations, standards, and institutional priorities (Ioannidou & Zarifis, 2026). The expansion of datafication has further introduced temporal pressures into governance, as schools and systems are increasingly expected to produce continuous, rapidly updated data for monitoring, comparison, prediction, and intervention (Madsen et al., 2025). Although these mechanisms may enhance evidence-based decision-making and transparency, they can also narrow educational priorities if numerical indicators are treated as substitutes for professional judgment and broader educational values.

Digital transformation has therefore become inseparable from contemporary educational governance. Technologies are no longer used only to support teaching; they increasingly structure administrative processes, data collection, resource management, communication, monitoring, decision-making, and relationships between public and private actors. The integration of innovative technologies can facilitate more responsive and progressive forms of governance when digital tools are aligned with institutional objectives and educational values (Abdallah et al., 2024). Emerging models also propose the integration of artificial intelligence, blockchain, and data-driven management systems to improve transparency, efficiency, security, predictive capacity, and coordination within educational governance (Gurram et al., 2025). A systematic review of e-governance in educational institutions likewise shows that digital governance may enhance administrative efficiency, service delivery, and accessibility while

simultaneously generating challenges related to infrastructure, capability, security, implementation, and institutional readiness (Al-Busmait et al., 2025). Thus, digitalization should be treated as a governance transformation rather than merely an administrative modernization project.

At the same time, digital educational governance raises important questions about power and privatization. Educational platforms often introduce private technology companies into processes that were traditionally controlled by public educational authorities, thereby redistributing decision-making power through software architectures, data ownership, technical standards, and proprietary infrastructures. Platform governance can alter policy relationships by embedding educational decisions within technological ecosystems whose rules and interests may not be fully visible to schools or policymakers (Nichols & Dixon-Román, 2024). More recent analyses of platformed privatization further demonstrate how data and technological infrastructures may reshape the boundaries between public education and market actors and create new forms of dependency within educational systems (Nichols & Thrall, 2025). Digital governance therefore requires mechanisms for transparency, privacy, data protection, public accountability, technological equity, and the preservation of educational autonomy.

These technological and organizational transformations occur within a broader global governance environment. Educational systems are increasingly influenced by international organizations, cross-national assessments, policy comparison, global standards, transnational networks, and shared narratives about the future of education. Global educational governance can expand access to knowledge and facilitate cooperation, but it can also promote standardized visions whose relationship with national contexts requires critical examination (Elfert & Ydesen, 2024). Similarly, contemporary governance mechanisms may reflect market-oriented and neoliberal assumptions that emphasize competition, performance management, privatization, or managerial control, potentially altering the social and educational purposes of institutions (Alexsandy et al., 2025). Educational governance must therefore negotiate the relationship between global developments and national priorities rather than uncritically importing governance models developed in different institutional environments.

The economic dimension of governance is similarly consequential because policy objectives cannot be implemented without sustainable and equitable financial

arrangements. Secondary education systems must determine how resources are generated, distributed, monitored, and linked to strategic priorities. Governance consequently encompasses budgeting, financial transparency, cost efficiency, allocation of resources to disadvantaged groups, infrastructure investment, and diversification of funding sources. In systems characterized by fiscal constraints, inefficient allocation may undermine even well-designed educational reforms. Iranian studies of governance problems have identified interconnected structural, managerial, resource, and policy challenges whose effects accumulate over time and constrain the capacity of the education system to respond effectively to future demands (Khosh Eghbal Fard et al., 2025). Feasibility analyses of good-governance models within education organizations likewise indicate that governance reforms must be assessed in relation to existing organizational structures and practical implementation conditions rather than considered solely at the normative level (Fazeli et al., 2026).

The interdependence of governance dimensions is especially evident in periods of educational transformation. Structural reform without competent human resources may remain symbolic; decentralization without accountability may produce fragmentation; stakeholder participation without clear authority may become ceremonial; digitalization without equitable infrastructure may deepen disparities; and financial diversification without transparency may introduce new governance risks. Comparative examination of governance models in the digital age has consequently emphasized the need to integrate organizational transformation with technological change and school-level management (Bagheri Movahed et al., 2025). Systematic governance frameworks likewise suggest that educational governance should be understood holistically, encompassing structures, actors, processes, accountability relations, resources, and contextual conditions rather than isolated administrative variables (Asadzadeh et al., 2025). Such an integrated perspective is particularly relevant for secondary education, where governance processes connect central policy, regional administration, institutional management, teachers, students, families, and communities.

In Iran, the governance of secondary education is confronted with the simultaneous demands of improving educational quality, reducing administrative rigidity, strengthening school capacity, promoting equity, developing professional human resources, adapting to digital transformation, and increasing stakeholder participation.

Existing studies have addressed important elements of these issues, including good governance at national and organizational levels, educational policymaking, transformation of schools, collaborative governance, human-resource management, network governance, conflicts of interest, and digital change (Abbaspour, 2025; Fazeli et al., 2026; Karimian et al., 2025; Vahdani et al., 2026). However, the multidimensional nature of the problem means that findings dispersed across separate areas of research need to be systematically integrated into a coherent framework specifically relevant to secondary education. The literature also indicates that governance models are context-sensitive, since institutional history, administrative traditions, legal arrangements, professional cultures, technological capacities, and stakeholder relationships influence how governance principles can actually be implemented (Asadzadeh et al., 2025; Rodrigues et al., 2025).

Consequently, identifying the factors that shape educational governance requires a methodology capable of combining accumulated scholarly knowledge with the contextual judgment of experts. Meta-synthesis offers a means of systematically integrating findings across diverse theoretical and empirical studies and transforming dispersed concepts into higher-order dimensions and components. Yet literature-derived indicators may not fully capture contextual priorities, emerging challenges, or practical considerations within a particular educational system. Expert consensus techniques such as Delphi can complement meta-synthesis by evaluating the relevance and necessity of extracted indicators, eliminating weak or redundant items, and introducing contextually important factors that may be underrepresented in published research. Such an approach is particularly appropriate in a field characterized by rapidly changing technologies, institutional relationships, policy priorities, and governance mechanisms (Al-Busmait et al., 2025; Madsen et al., 2025). It also enables the development of a framework that connects theoretical comprehensiveness with practical validity.

Taken together, contemporary scholarship indicates that educational governance in secondary education cannot be reduced to administrative decentralization, school management, or governmental regulation alone. It is an integrated system involving structural flexibility, coherent policymaking, legal accountability, professional competence, distributed leadership, stakeholder participation, social trust, digital infrastructure, financial sustainability, and equitable resource allocation. Moreover,

governance operates simultaneously through vertical authority and horizontal networks, national policies and local contexts, public institutions and emerging private actors, human judgment and data-driven technologies. Understanding these interdependencies is essential for developing a secondary education system capable of adapting to technological and social change while maintaining educational quality, public accountability, equity, and institutional legitimacy (Alexsandy et al., 2025; Dovigo, 2024; Gallagher et al., 2024). Accordingly, the present study aimed to identify and validate the factors influencing educational governance in the secondary education system through a qualitative approach combining meta-synthesis and the Delphi technique.

2. Methods and Materials

2.1. Study Design and Participants

The present study was conducted to identify, develop, and validate the factors and indicators underlying educational governance in the secondary education system. In terms of purpose, the study was applied, while methodologically it adopted a qualitative and exploratory design. The research process consisted of two complementary phases: a meta-synthesis phase and a Delphi phase. The meta-synthesis was employed to systematically integrate the theoretical and empirical literature and identify the initial dimensions, components, and indicators of educational governance, whereas the Delphi technique was subsequently used to refine and validate the extracted indicators and establish expert consensus regarding their importance and relevance to secondary education. In the first phase, the study population consisted of national and international scholarly literature addressing educational governance and closely related concepts, including educational administration and policy-making, secondary education governance, educational accountability, decentralization, educational equity, stakeholder participation, educational leadership, human resource management, and the financing of education. A systematic search of the literature was conducted during 2025–2026 across a broad range of national and international scientific databases. The national databases included the Islamic World Science Citation Center, University of Tehran scientific and research databases, the Iranian Research Institute for Information Science and Technology, Scientific Information Database, Institute for Humanities and Cultural Studies databases, scientific journal management systems, ElmNet, IranMedex,

Magiran, Medlib, Iranian medical journal databases, Noormags, and Civilica. International sources were searched through Google Scholar, Web of Science, PubMed, Scopus, Taylor & Francis Online, SAGE Journals, ERIC, ScienceDirect, ProQuest, Wiley Online Library, Springer, IEEE, JSTOR, Oxford Academic, Cambridge Core, EBSCOhost, and PsycINFO. The search strategy focused on studies directly or closely related to educational governance and its structural, policy, human, participatory, and economic dimensions, particularly within school and secondary education settings. Studies were eligible for inclusion when they had a clear conceptual or empirical relationship with educational governance or closely associated constructs, focused on education systems, schools, educational administration, or educational policy, were published through academically credible sources, had accessible full texts, and presented concepts, findings, dimensions, components, or indicators that could be extracted for development of the proposed educational governance framework. Duplicate publications, studies without a clear relationship to the research topic, non-scholarly materials, documents for which full texts were unavailable, and studies that did not contain sufficiently explicit or codable findings relevant to educational governance were excluded. Following successive screening of titles, abstracts, and full texts, 31 unique and substantively relevant sources were retained for the final meta-synthesis. In the second phase, the expert population consisted of specialists with relevant knowledge and professional or academic expertise in education, secondary education administration, educational policy-making, educational management, and educational governance. Using purposive expert selection, 18 individuals with appropriate subject-matter expertise participated in the Delphi panel. Their role was to assess the importance, necessity, conceptual appropriateness, and practical relevance of the indicators generated through the meta-synthesis and to contribute to the refinement of the final educational governance model.

2.2. Instruments

Data collection was conducted through two complementary instruments corresponding to the two phases of the study. In the meta-synthesis phase, the principal data collection mechanism was a structured literature search and data extraction procedure. Search terms and combinations of concepts related to educational governance, governance of education systems, secondary education policy and

administration, accountability, decentralization, educational justice and equity, stakeholder involvement, leadership, human resources, and educational financing were used to identify potentially relevant studies. After removal of duplicate records, the retrieved documents were subjected to sequential screening based on their titles, abstracts, and full texts. The selected studies were then reviewed using a systematic extraction framework designed to capture statements, findings, concepts, constructs, dimensions, components, and indicators related to the governance of secondary education. Particular attention was given to findings that could contribute to the development of an integrated conceptual model rather than merely describing isolated administrative practices. The extraction process generated an initial pool of concepts that was progressively organized through qualitative coding. Following the completion of the meta-synthesis, 132 preliminary indicators were identified and organized within one overarching construct of educational governance, five major dimensions, and 20 components. The five dimensions emerging from the synthesis were structural, policy-related, human, participatory, and economic dimensions. These indicators constituted the basis for development of the Delphi questionnaire used in the second phase. The questionnaire contained all 132 indicators identified through the literature synthesis, and panel members were asked to evaluate each indicator using a five-point rating scale reflecting its perceived importance and necessity for educational governance in the secondary education system. In addition to the quantitative rating of each indicator, space was provided for qualitative comments, recommended revisions, conceptual clarifications, and suggestions for additional indicators. This open-response component was included to ensure that the final framework would not be restricted exclusively to concepts obtained from the published literature and could also incorporate the professional judgment and contextual knowledge of experts. The questionnaire was revised across successive Delphi rounds in accordance with the results of the preceding round, such that indicators receiving insufficient support were removed or modified and the remaining indicators were resubmitted to the expert panel for further evaluation.

2.3. Data Analysis

Data analysis was conducted separately but sequentially for the meta-synthesis and Delphi phases. In the meta-synthesis phase, the full texts of the 31 selected studies were

examined in detail, and all statements, findings, interpretations, and conceptual propositions relevant to educational governance were identified and extracted. The analysis began with the identification of meaningful units associated with the governance of education and secondary schooling. These meaningful units were converted into preliminary qualitative codes representing specific governance characteristics, mechanisms, conditions, or requirements. Codes that were semantically equivalent, highly similar, or conceptually overlapping were then compared and merged to reduce redundancy. Subsequently, related codes were clustered at a higher level of abstraction and organized into coherent components. A hierarchical coding strategy was used to maintain conceptual consistency across different analytical levels: each indicator was assigned to a corresponding component, each component was situated within a broader dimension, and the identified dimensions were integrated under the overarching construct of educational governance. Through this iterative process of comparison, integration, abstraction, and categorization, 132 initial indicators were organized into 20 components and five principal dimensions comprising structural, policy-related, human, participatory, and economic aspects of educational governance. In the Delphi phase, expert responses were analyzed after each round to determine the degree of support for individual indicators and the overall convergence of expert judgments. The mean score assigned to each indicator served as the primary criterion for retention. Indicators with a mean expert rating below 4.00 on the five-point scale were considered to have insufficient expert support and were therefore removed from the final framework or, where conceptually justified by expert comments, revised before reconsideration. Indicators achieving a mean score of 4.00 or higher were retained for subsequent rounds and eventual inclusion in the model. Qualitative comments provided by experts were also reviewed and used to clarify wording, eliminate conceptual overlap, refine the placement of indicators within components and dimensions, and consider the inclusion of newly proposed indicators. The Delphi process was conducted over four successive rounds. After each round, the results were synthesized and the revised set of indicators was returned to the panel, allowing participants to reassess the remaining indicators in light of the emerging collective judgment. The degree of consensus among panel members was assessed using Kendall's coefficient of concordance. In the final rounds, Kendall's coefficient exceeded 0.70, indicating a substantial and acceptable level of convergence

among the experts. The Delphi process was therefore concluded after the fourth round, when sufficient stability and consensus had been achieved regarding the relevance, importance, and conceptual appropriateness of the indicators included in the educational governance framework.

3. Findings and Results

The meta-synthesis analysis resulted in the identification of a comprehensive set of factors associated with educational governance in the secondary education system. Through

systematic extraction, comparison, integration, and categorization of concepts derived from the 31 selected sources, a total of 132 initial indicators were identified. These indicators were organized hierarchically into 20 components and five overarching dimensions: structural, policy-related, human, participatory, and economic. Table 1 presents the complete structure derived from the meta-synthesis phase, including the dimensions, components, indicators, corresponding codes, and the source from which each indicator was extracted.

Table 1

Dimensions, Components, and Indicators Derived from the Meta-Synthesis

No.	Dimension	Dimension Code	Component	Component Code	Indicator	Indicator Code
1	Structural	A	Administrative decentralization	A1	Degree of delegation of authority to educational districts	A1-1
2	Structural	A	Administrative decentralization	A1	School autonomy in operational decision-making	A1-2
3	Structural	A	Administrative decentralization	A1	Reduction of bureaucratic layers in directives	A1-3
4	Structural	A	Administrative decentralization	A1	Flexibility of organizational structures in accordance with local conditions	A1-4
5	Structural	A	Administrative decentralization	A1	Balanced distribution of authority between operational and headquarters levels	A1-5
6	Structural	A	Administrative decentralization	A1	Existence of self-regulatory mechanisms at the school level	A1-6
7	Structural	A	Administrative decentralization	A1	Transparency in reporting hierarchies	A1-7
8	Structural	A	Reengineering of management processes	A2	Digitalization and intelligent administration of processes	A2-1
9	Structural	A	Reengineering of management processes	A2	Elimination of parallel procedures in headquarters management	A2-2
10	Structural	A	Reengineering of management processes	A2	Standardization of implementation protocols in secondary schools	A2-3
11	Structural	A	Reengineering of management processes	A2	Establishment of a Total Quality Management system at headquarters	A2-4
12	Structural	A	Reengineering of management processes	A2	Increasing agility of decision-making structures during crises	A2-5
13	Structural	A	Reengineering of management processes	A2	Optimization of organizational information flows	A2-6
14	Structural	A	Reengineering of management processes	A2	Establishment of an organizational knowledge management system	A2-7
15	Structural	A	Reengineering of management processes	A2	Simplification of administrative procedures for developing and communicating educational guidelines	A2-8
16	Structural	A	Reengineering of management processes	A2	Reduction of approval stages and levels in issuing educational directives and decisions	A2-9
17	Structural	A	Reengineering of management processes	A2	Accelerating communication of decisions by eliminating unnecessary administrative procedures	A2-10
18	Structural	A	Multilevel co-regulation	A3	Establishment of horizontal linkages among neighboring schools	A3-1
19	Structural	A	Multilevel co-regulation	A3	Structured interaction with parallel institutions such as municipalities and welfare organizations	A3-2
20	Structural	A	Multilevel co-regulation	A3	Management of conflicts of interest at intermediate levels	A3-3
21	Structural	A	Multilevel co-regulation	A3	Formation of regional educational consortia	A3-4

22	Structural	A	Multilevel co-regulation	A3	Development of collaboration and synergy networks among schools and educational centers at the regional level	A3-5
23	Structural	A	Multilevel co-regulation	A3	Establishment of strategic alliances among educational units for joint use of resources and capacities	A3-6
24	Structural	A	Multilevel co-regulation	A3	Strengthening interinstitutional cooperation among schools, education departments, and other educational organizations	A3-7
25	Structural	A	Multilevel co-regulation	A3	Use of shared platforms for resource sharing	A3-8
26	Structural	A	Multilevel co-regulation	A3	Strengthening the role of provincial education councils	A3-9
27	Structural	A	Multilevel co-regulation	A3	Structural adaptability to technological changes	A3-10
28	Structural	A	Modern educational capacities	A4	Compliance of schools with modern physical infrastructure standards	A4-1
29	Structural	A	Modern educational capacities	A4	Equitable access to information technology infrastructure	A4-2
30	Structural	A	Modern educational capacities	A4	Equipping secondary schools with specialized laboratories and workshops	A4-3
31	Structural	A	Modern educational capacities	A4	Physical environments appropriate for research-oriented education	A4-4
32	Structural	A	Modern educational capacities	A4	Physical and psychological safety of the school environment	A4-5
33	Structural	A	Structural accountability system	A5	Establishment of internal and external monitoring systems	A5-1
34	Structural	A	Structural accountability system	A5	Definition of institutional performance evaluation indicators	A5-2
35	Structural	A	Structural accountability system	A5	Availability of arbitration and complaint-handling bodies	A5-3
36	Structural	A	Structural accountability system	A5	Transparency in publication of annual performance reports	A5-4
37	Structural	A	Structural accountability system	A5	Legal requirements for accountability to higher-level authorities	A5-5
38	Structural	A	Structural accountability system	A5	School ranking system based on national standards	A5-6
39	Structural	A	Structural accountability system	A5	Continuous monitoring of deviations from strategic plans	A5-7
40	Policy	B	Coherence of upstream policy documents	B1	Alignment of national documents with global educational trends	B1-1
41	Policy	B	Coherence of upstream policy documents	B1	Clarity of the overarching objectives of the Fundamental Transformation Document	B1-2
42	Policy	B	Coherence of upstream policy documents	B1	Alignment of budgeting with strategic document priorities	B1-3
43	Policy	B	Coherence of upstream policy documents	B1	Availability of implementation appendices for educational legislation	B1-4
44	Policy	B	Coherence of upstream policy documents	B1	Updating laws in accordance with the needs of new generations	B1-5
45	Policy	B	Coherence of upstream policy documents	B1	Capacity to translate policies into operational programs	B1-6
46	Policy	B	Rule of law	B2	Guaranteeing the right to free and high-quality education	B2-1
47	Policy	B	Rule of law	B2	Legal protection of teachers' and students' rights	B2-2
48	Policy	B	Rule of law	B2	Legal action against discrimination in the distribution of educational facilities	B2-3
49	Policy	B	Rule of law	B2	Transparency in recruitment and employment processes	B2-4
50	Policy	B	Rule of law	B2	Compliance with legal regulations in non-governmental schools	B2-5
51	Policy	B	Rule of law	B2	Availability of enforcement mechanisms for educational regulations	B2-6
52	Policy	B	Rule of law	B2	Equity in distribution of educational opportunities in disadvantaged areas	B2-7
53	Policy	B	Educational diplomacy	B3	Active participation in regional educational agreements	B3-1

54	Policy	B	Educational diplomacy	B3	Alignment of educational qualifications with international standards	B3-2
55	Policy	B	Educational diplomacy	B3	Exchange of successful experiences with international organizations	B3-3
56	Policy	B	Educational diplomacy	B3	Participation in international assessments	B3-4
57	Policy	B	Educational diplomacy	B3	Internationalization of educational content in emerging sciences	B3-5
58	Policy	B	Educational diplomacy	B3	Attraction of international scientific and technical support	B3-6
59	Policy	B	Educational diplomacy	B3	Management of the educational system's regional brand	B3-7
60	Policy	B	Standard-setting	B4	Development of national quality standards for secondary education	B4-1
61	Policy	B	Standard-setting	B4	Existence of independent accreditation bodies	B4-2
62	Policy	B	Standard-setting	B4	Monitoring of supplementary educational content available in the open market	B4-3
63	Policy	B	Standard-setting	B4	Definition of professional competency indicators for teachers	B4-4
64	Human	C	Meritocracy	B5	Selection of managers through assessment centers	B5-1
65	Human	C	Meritocracy	B5	Specialization-based appointments at headquarters	B5-2
66	Human	C	Meritocracy	B5	Evaluation of managers' performance based on learning outcomes	B5-3
67	Human	C	Meritocracy	B5	Development of managers' soft skills, including leadership and negotiation	B5-4
68	Human	C	Meritocracy	B5	Observance of professional ethics at managerial levels	B5-5
69	Human	C	Meritocracy	B5	Specialized succession planning for critical positions	B5-6
70	Human	C	Teacher empowerment and well-being	C1	Alignment of salaries and benefits with inflation and social status	C1-1
71	Human	C	Teacher empowerment and well-being	C1	Teacher participation in curriculum development	C1-2
72	Human	C	Teacher empowerment and well-being	C1	Support for action research	C1-3
73	Human	C	Teacher empowerment and well-being	C1	Teachers' physical and psychological health in the workplace	C1-4
74	Human	C	Teacher empowerment and well-being	C1	Job security and a transparent career advancement pathway	C1-5
75	Human	C	Teacher empowerment and well-being	C1	Teachers' professional autonomy in the classroom	C1-6
76	Human	C	Distributed educational leadership	C2	Involving teachers in school decision-making	C2-1
77	Human	C	Distributed educational leadership	C2	Formation of self-managed educational groups	C2-2
78	Human	C	Distributed educational leadership	C2	Strengthening counselors' role in school policy-making	C2-3
79	Human	C	Distributed educational leadership	C2	Climate of mutual trust between management and educational staff	C2-4
80	Human	C	Distributed educational leadership	C2	Delegation of project responsibilities to staff	C2-5
81	Human	C	Distributed educational leadership	C2	Culture of cooperation rather than destructive competition	C2-6
82	Human	C	Distributed educational leadership	C2	Support for classroom-level teaching innovations	C2-7
83	Human	C	Professional ethics and commitment	C3	Development of a charter of ethics for educational governance	C3-1
84	Human	C	Professional ethics and commitment	C3	Commitment to educational and national objectives	C3-2
85	Human	C	Professional ethics and commitment	C3	Transparency in employees' financial and administrative conduct	C3-3
86	Human	C	Professional ethics and commitment	C3	Addressing behaviors that violate human dignity	C3-4
87	Human	C	Professional ethics and commitment	C3	Equity orientation in individual evaluations	C3-5
88	Human	C	Professional ethics and commitment	C3	Accountability for students' academic decline	C3-6

89	Human	C	Professional ethics and commitment	C3	Protection of privacy in teacher–student relationships	C3-7
90	Participatory	D	Family-centered governance	D1	Genuine parental participation in decision-making councils	D1-1
91	Participatory	D	Family-centered governance	D1	Family education programs aligned with school needs	D1-2
92	Participatory	D	Family-centered governance	D1	Transparent reporting to parents regarding student status	D1-3
93	Participatory	D	Family-centered governance	D1	Voluntary parental participation in specialized school activities	D1-4
94	Participatory	D	Family-centered governance	D1	School responsiveness to families' legitimate demands	D1-5
95	Participatory	D	Family-centered governance	D1	Mechanisms for assessing family satisfaction	D1-6
96	Participatory	D	Social responsibility	D2	Attracting philanthropists' participation in infrastructure development	D2-1
97	Participatory	D	Social responsibility	D2	Cooperation with NGOs in addressing social harms	D2-2
98	Participatory	D	Social responsibility	D2	Promotion of endowment and charitable giving in education	D2-3
99	Participatory	D	Social responsibility	D2	Transparency in expenditure of charitable resources	D2-4
100	Participatory	D	Social responsibility	D2	Linkage between schools and regional businesses	D2-5
101	Participatory	D	Social responsibility	D2	School responsibility toward its surrounding community and neighborhood	D2-6
102	Participatory	D	Social responsibility	D2	Utilization of alumni capacities	D2-7
103	Participatory	D	Social capital	D3	Enhancement of the social standing of schools in society	D3-1
104	Participatory	D	Social capital	D3	Level of public trust in the integrity of the educational system	D3-2
105	Participatory	D	Social capital	D3	Degree of cohesion among different stakeholders	D3-3
106	Participatory	D	Social capital	D3	Transparency in communicating incidents and events	D3-4
107	Participatory	D	Social capital	D3	Reduction of the gap between society and school	D3-5
108	Participatory	D	Social capital	D3	Participation in addressing neighborhood social problems	D3-6
109	Participatory	D	Social capital	D3	Positive media representation of educational activities	D3-7
110	Economic	E	Diversification of financial resources	E1	Reduction of dependence on direct government funding	E1-1
111	Economic	E	Diversification of financial resources	E1	Generation of sustainable school-specific revenues	E1-2
112	Economic	E	Diversification of financial resources	E1	Use of public–private partnership models	E1-3
113	Economic	E	Diversification of financial resources	E1	Utilization of reserve and investment funds	E1-4
114	Economic	E	Diversification of financial resources	E1	Attraction of international aid and external financing	E1-5
115	Economic	E	Diversification of financial resources	E1	Commercialization of scientific and research achievements	E1-6
116	Economic	E	Diversification of financial resources	E1	Rental of surplus school spaces outside instructional hours	E1-7
117	Economic	E	Cost management	E2	Cost–benefit analysis of new educational initiatives	E2-1
118	Economic	E	Cost management	E2	Use of technology to reduce administrative costs	E2-2
119	Economic	E	Cost management	E2	Optimization of the student–teacher ratio	E2-3
120	Economic	E	Cost management	E2	Prevention of duplication in equipment procurement	E2-4
121	Economic	E	Cost management	E2	Establishment of a full-cost accounting system	E2-5
122	Economic	E	Financial discipline	E3	Periodic and accurate auditing of school accounts	E3-1
123	Economic	E	Financial discipline	E3	Establishment of an integrated transactions and tenders system	E3-2
124	Economic	E	Financial discipline	E3	Prevention of corruption and embezzlement in funds	E3-3
125	Economic	E	Financial discipline	E3	Transparency in contractor agreements, including transportation and food services	E3-4
126	Economic	E	Financial discipline	E3	Training school principals in financial regulations	E3-5
127	Economic	E	Performance-based budgeting	E4	Linking budgets to standardized evaluation results	E4-1

128	Economic	E	Performance-based budgeting	E4	Participation of school principals in regional budgeting	E4-2
129	Economic	E	Performance-based budgeting	E4	Online reporting of expenditures to stakeholders	E4-3
130	Economic	E	Performance-based budgeting	E4	Budgeting based on strategic programs	E4-4
131	Economic	E	Performance-based budgeting	E4	Budget flexibility in emergency situations	E4-5
132	Economic	E	Performance-based budgeting	E4	Accurate monitoring of organizational cash flows	E4-6

As shown in Table 1, the structural dimension constituted the largest part of the initial framework, encompassing 39 indicators distributed across five components: administrative decentralization, reengineering of management processes, multilevel co-regulation, modern educational capacities, and the structural accountability system. The indicators associated with this dimension demonstrate that educational governance was conceptualized not merely as a formal administrative hierarchy but as a system requiring redistribution of authority, organizational flexibility, simplified administrative procedures, horizontal and interinstitutional coordination, technological adaptation, adequate educational infrastructure, and formal accountability mechanisms. Administrative decentralization emphasized delegation, school autonomy, balanced authority, and self-regulation, while process reengineering focused primarily on improving the efficiency, quality, speed, and knowledge orientation of administrative functions.

The policy dimension comprised 24 indicators organized into four components: coherence of upstream policy documents, rule of law, educational diplomacy, and standard-setting. The findings indicated that effective educational governance requires alignment between overarching educational policies and operational processes. Indicators related to the coherence of upstream documents highlighted the importance of clear national objectives, strategic budget alignment, enforceable implementation mechanisms, and adaptability of legislation to emerging social and educational demands. The rule-of-law component emphasized free and quality education, protection of stakeholder rights, anti-discrimination measures, transparent recruitment, legal compliance, enforceability of educational regulations, and equitable opportunities for disadvantaged regions. Educational diplomacy and standard-setting extended the governance framework beyond domestic administration by incorporating international cooperation, participation in global assessments, alignment with international standards, and development of national quality and professional competency standards.

The human dimension consisted of 26 indicators across four components concerned with meritocracy, teacher empowerment and well-being, distributed educational leadership, and professional ethics and commitment. The identified indicators suggested that the quality of governance is highly dependent on the competencies, professional conditions, participation, and ethical conduct of educational personnel. Meritocracy emphasized systematic selection, specialized appointments, performance-based evaluation, managerial soft skills, professional ethics, and succession planning. Teacher-related indicators addressed both material and professional conditions, including appropriate compensation, job security, physical and psychological health, involvement in curriculum development, action research, and professional autonomy. At the organizational level, distributed leadership emphasized shared decision-making, self-managed professional groups, trust, delegation, cooperation, and support for instructional innovation.

The participatory dimension included 20 indicators within the three components of family-centered governance, social responsibility, and social capital. These findings demonstrated that educational governance extends beyond formal governmental and school structures and depends substantially on the quality of interaction between schools and their broader stakeholder environment. Family-centered governance involved meaningful parental representation, family education, transparent information provision, responsiveness to legitimate demands, and systematic assessment of family satisfaction. Social responsibility encompassed collaboration with charitable organizations, NGOs, businesses, communities, and alumni, together with transparent management of externally mobilized resources. Social capital reflected the relational foundations of governance, particularly public trust, stakeholder cohesion, school-community integration, engagement with community problems, transparent communication, and the development of a positive public image of educational institutions.

Finally, the economic dimension contained 23 indicators and four components: diversification of financial resources,

cost management, financial discipline, and performance-based budgeting. The indicators showed that financial governance was conceptualized in terms of both resource generation and responsible resource utilization. Diversification of funding sources included sustainable school revenues, public-private partnerships, reserve and investment mechanisms, international financing, commercialization of scientific outputs, and utilization of surplus physical capacity. Cost management focused on efficiency and rational allocation, while financial discipline emphasized auditing, procurement transparency, corruption

prevention, and managerial financial literacy. Performance-based budgeting linked financial allocation to strategic priorities, evaluation outcomes, stakeholder participation, online expenditure reporting, emergency flexibility, and cash-flow monitoring. Taken together, the meta-synthesis findings indicated that educational governance in secondary education is a multidimensional construct in which structural arrangements, policy coherence, human capacity, stakeholder participation, and economic sustainability operate as mutually reinforcing elements.

Table 2

Integrated Results of the Delphi Rounds for Educational Governance in Secondary Education

No.	Dimension	Component	Indicator	Round 1	Round 2	Round 3	Round 4	Final Status	Type of Change
1	Structural	Administrative decentralization	Degree of delegation of authority to educational districts	4.6	4.3	4.2	4.2	Approved	Retained
2	Structural	Administrative decentralization	School autonomy in operational decision-making	4.3	4.1	4.2	4.2	Approved	Retained
3	Structural	Administrative decentralization	Reduction of bureaucratic layers in directives	4.5	4.3	4.4	4.4	Approved	Retained
4	Structural	Administrative decentralization	Simplification of administrative procedures for developing and communicating educational guidelines	2.9	Deleted	–	–	Rejected	Deleted in Round 1
5	Structural	Administrative decentralization	Reduction of approval stages and levels in issuing educational directives and decisions	2.1	Deleted	–	–	Rejected	Deleted in Round 1
6	Structural	Administrative decentralization	Accelerating communication of decisions by eliminating unnecessary administrative procedures	2.8	Deleted	–	–	Rejected	Deleted in Round 1
7	Structural	Administrative decentralization	Flexibility of organizational structures in accordance with local conditions	4.5	4.2	4.3	4.3	Approved	Retained
8	Structural	Administrative decentralization	Balanced distribution of authority between operational and headquarters levels	4.7	4.5	4.5	4.5	Approved	Retained
9	Structural	Administrative decentralization	Existence of self-regulatory mechanisms at the school level	4.6	4.4	4.5	4.5	Approved	Retained
10	Structural	Administrative decentralization	Transparency in reporting hierarchies	5.0	4.8	4.8	4.8	Approved	Retained
11	Structural	Process reengineering	Digitalization and intelligent administration of administrative processes	4.3	4.2	4.3	4.3	Approved	Retained
12	Structural	Process reengineering	Elimination of parallel procedures in headquarters management	4.2	4.1	4.1	4.1	Approved	Retained
13	Structural	Process reengineering	Standardization of implementation protocols in secondary schools	4.6	4.4	4.5	4.5	Approved	Retained
14	Structural	Process reengineering	Establishment of Total Quality Management (TQM) at headquarters	4.4	4.2	4.3	4.3	Approved	Retained
15	Structural	Process reengineering	Increasing the agility of decision-making structures during crises	4.1	4.0	4.2	4.2	Approved	Retained
16	Structural	Process reengineering	Optimization of organizational information flows	4.7	4.5	4.6	4.6	Approved	Retained
17	Structural	Process reengineering	Establishment of organizational Knowledge Management (KM)	4.6	4.3	4.4	4.4	Approved	Retained

18	Structural	Multilevel co-regulation	Establishment of horizontal linkages among neighboring schools	4.0	4.1	4.1	4.1	Approved	Retained
19	Structural	Multilevel co-regulation	Structured interaction with parallel institutions such as municipalities and welfare organizations	4.3	4.2	4.2	4.2	Approved	Retained
20	Structural	Multilevel co-regulation	Management of conflicts of interest at intermediate levels	4.5	4.3	4.3	4.3	Approved	Retained
21	Structural	Multilevel co-regulation	Formation of regional educational consortia	4.8	4.6	4.7	4.7	Approved	Retained
22	Structural	Multilevel co-regulation	Development of collaboration and synergy networks among schools at the regional level	2.5	Deleted	–	–	Rejected	Deleted in Round 1
23	Structural	Multilevel co-regulation	Establishment of strategic alliances among educational units for joint utilization of resources	2.3	Deleted	–	–	Rejected	Deleted in Round 1
24	Structural	Multilevel co-regulation	Strengthening interinstitutional cooperation among schools, education departments, and other institutions	2.8	Deleted	–	–	Rejected	Deleted in Round 1
25	Structural	Multilevel co-regulation	Use of shared platforms for resource sharing	4.1	4.0	4.2	4.2	Approved	Retained
26	Structural	Multilevel co-regulation	Strengthening the role of provincial education councils	5.0	4.8	4.8	4.8	Approved	Retained
27	Structural	Multilevel co-regulation	Structural adaptability to technological changes	4.3	4.2	4.3	4.3	Approved	Retained
28	Structural	Modern capacities	Compliance of schools with modern physical infrastructure standards	4.3	4.2	4.2	4.2	Approved	Retained
29	Structural	Modern capacities	Equitable access to information technology infrastructure	4.5	4.4	4.4	4.4	Approved	Retained
30	Structural	Modern capacities	Equipping secondary schools with specialized laboratories and workshops	4.7	4.5	4.5	4.5	Approved	Retained
31	Structural	Modern capacities	Physical environments appropriate for research-oriented education	4.4	4.3	4.3	4.3	Approved	Retained
32	Structural	Modern capacities	Physical and psychological safety of the school environment	4.6	4.4	4.5	4.5	Approved	Retained
33	Structural	Modern capacities	Sustainability of energy resources and environmental considerations in schools	–	4.3	4.3	4.4	Approved	Added in Round 2
34	Structural	Modern capacities	Alignment of school architecture with the Fundamental Transformation Document	–	4.2	4.3	4.3	Approved	Added in Round 2
35	Structural	Structural accountability	Establishment of internal and external monitoring systems	4.3	4.2	4.3	4.3	Approved	Retained
36	Structural	Structural accountability	Definition of institutional performance evaluation indicators	4.5	4.3	4.4	4.4	Approved	Retained
37	Structural	Structural accountability	Availability of arbitration and complaint-handling bodies	4.2	4.1	4.1	4.1	Approved	Retained
38	Structural	Structural accountability	Transparency in publication of annual performance reports	4.6	4.4	4.5	4.5	Approved	Retained
39	Structural	Structural accountability	Legal requirements for accountability to higher-level authorities	4.4	4.3	4.3	4.3	Approved	Retained
40	Structural	Structural accountability	School ranking system based on national standards	4.5	4.3	4.4	4.4	Approved	Retained
41	Structural	Structural accountability	Continuous monitoring of deviations from strategic plans	4.6	4.4	4.5	4.5	Approved	Retained
42	Policy	Coherence of upstream documents	Alignment of national documents with global educational trends	4.4	4.2	4.3	4.3	Approved	Retained
43	Policy	Coherence of upstream documents	Absence of contradictions between laws enacted by Parliament and councils	–	4.5	4.5	4.6	Approved	Added in Round 2
44	Policy	Coherence of upstream documents	Clarity of the overarching objectives of the Fundamental Transformation Document	4.3	4.2	4.2	4.2	Approved	Retained

45	Policy	Coherence of upstream documents	Alignment of budgeting with strategic document priorities	4.5	4.3	4.4	4.4	Approved	Retained
46	Policy	Coherence of upstream documents	Availability of implementation appendices for educational legislation	4.6	4.4	4.5	4.5	Approved	Retained
47	Policy	Coherence of upstream documents	Updating laws in accordance with the needs of new generations	4.4	4.3	4.3	4.3	Approved	Retained
48	Policy	Coherence of upstream documents	Capacity to translate policies into operational programs	4.7	4.5	4.6	4.6	Approved	Retained
49	Policy	Rule of law	Guaranteeing the right to free and high-quality education	4.8	4.6	4.6	4.6	Approved	Retained
50	Policy	Rule of law	Legal protection of teachers' and students' rights	4.6	4.4	4.5	4.5	Approved	Retained
51	Policy	Rule of law	Legal action against discrimination in the distribution of educational facilities	4.7	4.5	4.6	4.6	Approved	Retained
52	Policy	Rule of law	Transparency in recruitment and employment processes	4.5	4.3	4.4	4.4	Approved	Retained
53	Policy	Rule of law	Compliance with legal regulations in non-governmental schools	4.2	4.1	4.1	4.1	Approved	Retained
54	Policy	Rule of law	Existence of enforcement mechanisms for educational regulations	4.8	4.7	4.7	4.7	Approved	Retained
55	Policy	Rule of law	Equity in the distribution of educational opportunities in disadvantaged regions	4.9	4.8	4.8	4.8	Approved	Retained
56	Policy	Educational diplomacy	Active participation in regional educational agreements	4.1	4.0	4.1	4.1	Approved	Retained
57	Policy	Educational diplomacy	Alignment of educational qualifications with international ISCED standards	4.2	4.1	4.2	4.2	Approved	Retained
58	Policy	Educational diplomacy	Exchange of successful experiences with international organizations such as UNESCO	4.3	4.2	4.3	4.3	Approved	Retained
59	Policy	Educational diplomacy	Participation in international assessments such as PISA and TIMSS	4.5	4.4	4.4	4.4	Approved	Retained
60	Policy	Educational diplomacy	Internationalization of educational content in emerging sciences	4.4	4.2	4.3	4.3	Approved	Retained
61	Policy	Educational diplomacy	Attraction of international scientific and technical support	4.1	4.0	4.0	4.0	Approved	Retained
62	Policy	Educational diplomacy	Management of the educational system's regional brand	4.2	4.1	4.1	4.1	Approved	Retained
63	Policy	Standard-setting	Development of national quality standards for secondary education	4.6	4.4	4.5	4.5	Approved	Retained
64	Policy	Standard-setting	Existence of independent accreditation bodies	4.3	4.2	4.2	4.2	Approved	Retained
65	Policy	Standard-setting	Monitoring of supplementary educational content available in the open market	4.2	4.1	4.1	4.1	Approved	Retained
66	Policy	Standard-setting	Definition of professional competency indicators for teachers	4.7	4.5	4.6	4.6	Approved	Retained
67	Human	Meritocracy	Selection of managers through assessment centers	4.5	4.3	4.4	4.4	Approved	Retained
68	Human	Meritocracy	Specialization-based appointments at headquarters	4.8	4.6	4.7	4.7	Approved	Retained
69	Human	Meritocracy	Evaluation of managers' performance based on learning outcomes	4.4	4.2	4.3	4.3	Approved	Retained
70	Human	Meritocracy	Development of managers' soft skills, including leadership and negotiation	4.3	4.2	4.2	4.2	Approved	Retained
71	Human	Meritocracy	Observance of professional ethics at managerial levels	4.7	4.5	4.6	4.6	Approved	Retained

72	Human	Meritocracy	Establishment of a school principal ranking system	–	–	4.4	4.4	Approved	Added in Round 3
73	Human	Meritocracy	Specialized succession planning for critical positions	4.2	4.1	4.1	4.1	Approved	Retained
74	Human	Empowerment and well-being	Alignment of salaries and benefits with inflation and social status	4.8	4.7	4.8	4.8	Approved	Retained
75	Human	Empowerment and well-being	Knowledge-based in-service training programs	–	–	4.5	4.5	Approved	Added in Round 3
76	Human	Empowerment and well-being	Teacher participation in curriculum development	4.4	4.3	4.3	4.3	Approved	Retained
77	Human	Empowerment and well-being	Support for Action Research	4.3	4.2	4.2	4.2	Approved	Retained
78	Human	Empowerment and well-being	Teachers' physical and psychological health in the workplace	4.5	4.4	4.4	4.4	Approved	Retained
79	Human	Empowerment and well-being	Job security and a transparent career advancement pathway	4.6	4.5	4.5	4.5	Approved	Retained
80	Human	Empowerment and well-being	Teachers' professional autonomy in the classroom	4.3	4.2	4.3	4.3	Approved	Retained
81	Human	Distributed leadership	Involving teachers in school decision-making	4.5	4.4	4.4	4.4	Approved	Retained
82	Human	Distributed leadership	Formation of self-managed educational groups	4.2	4.1	4.1	4.1	Approved	Retained
83	Human	Distributed leadership	Strengthening counselors' role in school policy-making	4.1	4.0	4.0	4.0	Approved	Retained
84	Human	Distributed leadership	Climate of mutual trust between management and educational staff	4.7	4.5	4.6	4.6	Approved	Retained
85	Human	Distributed leadership	Delegation of project responsibilities to staff	4.2	4.1	4.2	4.2	Approved	Retained
86	Human	Distributed leadership	Culture of cooperation rather than destructive competition	4.4	4.3	4.3	4.3	Approved	Retained
87	Human	Distributed leadership	Support for classroom-level teaching innovations	4.5	4.4	4.5	4.5	Approved	Retained
88	Human	Professional ethics and commitment	Development of a charter of ethics for educational governance	4.3	4.2	4.2	4.2	Approved	Retained
89	Human	Professional ethics and commitment	Commitment to educational and national objectives	4.6	4.4	4.5	4.5	Approved	Retained
90	Human	Professional ethics and commitment	Transparency in employees' financial and administrative conduct	4.7	4.5	4.6	4.6	Approved	Retained
91	Human	Professional ethics and commitment	Addressing behaviors that violate human dignity	4.8	4.7	4.7	4.7	Approved	Retained
92	Human	Professional ethics and commitment	Equity orientation in individual evaluations	4.6	4.5	4.5	4.5	Approved	Retained
93	Human	Professional ethics and commitment	Accountability for students' academic decline	4.4	4.3	4.4	4.4	Approved	Retained
94	Human	Professional ethics and commitment	Protection of privacy in teacher–student relationships	4.8	4.7	4.7	4.7	Approved	Retained
95	Participatory	Family-centered governance	Genuine parental participation in decision-making councils	4.4	4.2	4.3	4.3	Approved	Retained
96	Participatory	Family-centered governance	Family education programs aligned with school needs	4.2	4.1	4.1	4.1	Approved	Retained
97	Participatory	Family-centered governance	Transparent reporting to parents regarding student status	4.5	4.4	4.4	4.4	Approved	Retained
98	Participatory	Family-centered governance	Voluntary parental participation in specialized school activities	4.1	4.0	4.0	4.0	Approved	Retained
99	Participatory	Family-centered governance	School responsiveness to families' legitimate demands	4.5	4.3	4.4	4.4	Approved	Retained
100	Participatory	Family-centered governance	Mechanisms for assessing family satisfaction	4.3	4.2	4.2	4.2	Approved	Retained
101	Participatory	Social responsibility	Attracting philanthropists' participation in infrastructure development	4.6	4.5	4.5	4.5	Approved	Retained
102	Participatory	Social responsibility	Cooperation with NGOs in addressing social harms	4.2	4.1	4.2	4.2	Approved	Retained
103	Participatory	Social responsibility	Promotion of endowment and charitable giving in education	4.3	4.2	4.2	4.2	Approved	Retained

104	Participatory	Social responsibility	Transparency in expenditure of charitable resources	4.8	4.6	4.7	4.7	Approved	Retained
105	Participatory	Social responsibility	Linkage between schools and regional businesses	4.1	4.0	4.1	4.1	Approved	Retained
106	Participatory	Social responsibility	School responsibility toward its surrounding community	4.2	4.1	4.1	4.1	Approved	Retained
107	Participatory	Social responsibility	Utilization of alumni capacities	4.3	4.2	4.3	4.3	Approved	Retained
108	Participatory	Social capital	Enhancement of the social standing of schools in society	4.5	4.4	4.4	4.4	Approved	Retained
109	Participatory	Social capital	Level of public trust in the integrity of the educational system	4.6	4.5	4.5	4.5	Approved	Retained
110	Participatory	Social capital	Degree of cohesion among different stakeholders	4.2	4.1	4.1	4.1	Approved	Retained
111	Participatory	Social capital	Transparency in communicating incidents and events	2.3	Deleted	–	–	Rejected	Deleted in Round 1
112	Participatory	Social capital	Reduction of the gap between society and school	4.4	4.3	4.3	4.3	Approved	Retained
113	Participatory	Social capital	Participation in addressing neighborhood social problems	4.1	4.0	4.1	4.1	Approved	Retained
114	Participatory	Social capital	Positive media representation of educational activities	4.2	4.1	4.2	4.2	Approved	Retained
115	Economic	Financial diversification	Reduction of dependence on direct government funding	4.3	4.1	4.2	4.2	Approved	Retained
116	Economic	Financial diversification	Generation of sustainable school-specific revenues	4.5	4.3	4.4	4.4	Approved	Retained
117	Economic	Financial diversification	Use of public-private partnership (PPP) models	4.2	4.1	4.1	4.1	Approved	Retained
118	Economic	Financial diversification	Utilization of reserve and investment funds	4.4	4.3	4.3	4.3	Approved	Retained
119	Economic	Financial diversification	Attraction of international aid and external financing	4.0	4.0	4.0	4.0	Approved	Retained
120	Economic	Financial diversification	Commercialization of scientific and research achievements	4.1	4.1	4.1	4.1	Approved	Retained
121	Economic	Financial diversification	Rental of surplus school spaces outside instructional hours	4.0	4.0	4.0	4.0	Approved	Retained
122	Economic	Cost management	Cost-benefit analysis of new educational initiatives	4.3	4.2	4.3	4.3	Approved	Retained
123	Economic	Cost management	Optimization of the supply chain and procurement of school equipment	4.5	4.4	4.4	4.4	Approved	Retained
124	Economic	Cost management	Accurate monitoring of organizational cash flows	4.2	4.1	4.2	4.2	Approved	Retained
125	Economic	Cost management	Establishment of performance-based budgeting in the educational system	4.6	4.5	4.5	4.5	Approved	Retained
126	Economic	Cost management	Reduction of headquarters expenditures through consolidation of overlapping districts	4.1	4.0	4.0	4.0	Approved	Retained
127	Economic	Cost management	Intelligent management of energy consumption in educational buildings	4.4	4.3	4.3	4.3	Approved	Retained
128	Economic	Distributive equity of resources	Allocation of per-student funding based on deprivation indices	4.8	4.7	4.8	4.8	Approved	Retained
129	Economic	Distributive equity of resources	Additional service payments for teachers in border regions	4.7	4.6	4.6	4.6	Approved	Retained
130	Economic	Distributive equity of resources	Provision of special facilities for nomadic boarding schools	4.6	4.5	4.5	4.5	Approved	Retained
131	Economic	Distributive equity of resources	Equitable distribution of non-governmental educational facilities across regions	4.3	4.2	4.2	4.2	Approved	Retained
132	Economic	Distributive equity of resources	Redistribution of local tax revenues to public education	4.4	4.3	4.3	4.3	Approved	Retained
133	Economic	Distributive equity of resources	Full educational coverage and reduction of hidden costs of schooling	4.5	4.4	4.4	4.4	Approved	Retained

134	Economic	Distributive equity of resources	Equitable distribution of welfare budgets for disadvantaged students	4.7	4.6	4.6	4.6	Approved	Retained
135	Economic	Distributive equity of resources	Special allocation of renovation funds to deteriorated schools	4.8	4.7	4.7	4.7	Approved	Retained
136	Economic	Distributive equity of resources	Establishment of government support funds for out-of-school students	4.6	4.5	4.5	4.5	Approved	Retained
137	Economic	Distributive equity of resources	Equity in the distribution of basic and advanced technological facilities	4.5	4.4	4.4	4.4	Approved	Retained

The integrated results of the four Delphi rounds showed substantial refinement of the initial meta-synthesis framework. In the first round, seven indicators received mean scores below the predetermined acceptance threshold of 4.00 and were consequently excluded from subsequent rounds. These indicators included three administrative indicators related to simplification and acceleration of educational directives, three indicators concerning regional collaboration and strategic alliances, and one indicator concerning transparency in communicating incidents and events. Their first-round means ranged from 2.1 to 2.9, indicating insufficient expert agreement regarding their necessity as distinct indicators of educational governance. In contrast, the overwhelming majority of the initial indicators met or exceeded the acceptance criterion and therefore progressed to subsequent rounds.

Expert feedback also resulted in the addition of five new indicators that were not included in the original meta-synthesis output. Three were introduced in the second Delphi round: sustainability of energy resources and environmental considerations in schools, alignment of school architecture with the Fundamental Transformation Document, and absence of contradictions between legislation enacted by Parliament and educational councils. Their Round 2 means were 4.3, 4.2, and 4.5, respectively, and all remained above the acceptance threshold in subsequent rounds. Two additional human-resource indicators were introduced in Round 3: establishment of a school principal ranking system and knowledge-based in-service training programs. Both obtained strong expert support, with mean scores of 4.4 and 4.5, respectively, in both the third and fourth rounds. These additions demonstrate that the Delphi procedure functioned not only as a mechanism for eliminating weak indicators but also as a means of increasing the contextual completeness of the model through expert-generated content.

Within the structural and policy dimensions, several indicators received particularly high and stable expert ratings. Transparency in reporting hierarchies and strengthening the role of provincial education councils each

reached a mean of 4.8 in the final round. Within the policy dimension, equity in the distribution of educational opportunities in disadvantaged regions also achieved a final mean of 4.8, while the presence of enforcement mechanisms for educational regulations achieved 4.7. Other highly endorsed indicators included formation of regional educational consortia, optimization of organizational information flows, the capacity to translate policies into operational programs, legal action against discriminatory distribution of educational resources, and definition of professional competencies for teachers. These patterns show that expert consensus was especially strong regarding transparency, enforceability, equity, policy operationalization, coordination, and institutional capacity.

Strong consensus was likewise observed in the human, participatory, and economic dimensions. Within the human dimension, alignment of teachers' salaries and benefits with inflation and social status received a final-round mean of 4.8, while professional ethics indicators related to protection of human dignity and teacher–student privacy each reached 4.7. Transparency in the use of charitable resources attained a mean of 4.7 within the participatory dimension. In the economic dimension, allocation of per-student funding according to deprivation indices obtained one of the highest final-round ratings at 4.8, while special allocation of renovation funding to deteriorated schools reached 4.7. Additional indicators addressing support for teachers in border regions, disadvantaged students, nomadic boarding schools, and out-of-school students also received consistently high ratings. Thus, the expert panel attached considerable importance not only to administrative effectiveness but also to professional dignity, ethical conduct, financial transparency, and distributive justice.

Across the successive rounds, the mean ratings generally became stable, with only limited fluctuations between the third and fourth rounds. Most retained indicators showed either identical ratings or changes of only 0.1 points during the final stages, indicating convergence in expert judgments. Kendall's coefficient of concordance exceeded 0.70 in the final rounds, demonstrating an acceptable and substantial

level of agreement among the 18 panel members. No additional indicators were proposed after the fourth round, and the stability of the ratings indicated that further iteration was unlikely to produce meaningful changes in the structure. Accordingly, the Delphi process was terminated after Round 4. Based strictly on the indicator statuses presented in Table 2, the final framework comprised **130 approved indicators**, calculated as 132 initial indicators minus seven indicators eliminated in the first round plus five indicators added through expert judgment. The final results therefore provided a refined and expert-validated representation of educational governance in secondary education encompassing structural, policy, human, participatory, and economic domains.

4. Discussion and Conclusion

The present study sought to identify and validate the factors influencing educational governance in the secondary education system through a two-stage qualitative process combining meta-synthesis and the Delphi technique. The meta-synthesis phase initially yielded 132 indicators organized into 20 components and five overarching dimensions: structural, policy-related, human, participatory, and economic. The subsequent four-round Delphi process refined this initial framework. Seven indicators that did not reach the predetermined mean threshold of 4.00 were removed in the first round, while five new indicators proposed by the experts were incorporated during the second and third rounds. Based on the indicator-level results, the final framework therefore comprised 130 validated indicators. The stabilization of expert ratings during the third and fourth rounds, together with a Kendall coefficient of concordance exceeding 0.70, demonstrated satisfactory convergence of expert judgments. Overall, the findings suggest that educational governance in secondary education should be understood as a multidimensional and interdependent system rather than as a narrowly administrative or managerial process. This interpretation is consistent with contemporary conceptualizations of governance that emphasize interactions among institutional structures, policy frameworks, professional actors, stakeholders, resources, accountability arrangements, and emerging technological environments (Asadzadeh et al., 2025; Rodrigues et al., 2025; Wilkins & Mifsud, 2024).

The structural dimension emerged as the broadest dimension of the initial meta-synthesis and included administrative decentralization, process reengineering,

multilevel co-regulation, modern educational capacities, and structural accountability. The Delphi findings confirmed the importance of most structural indicators, particularly transparency in reporting hierarchies, strengthening provincial education councils, regional educational consortia, optimization of information flows, equitable access to information technology, and the provision of appropriate educational infrastructure. These results indicate that effective governance requires a structural balance between decentralization and coordination. Delegating authority to educational regions and schools can increase responsiveness and contextual adaptability, but decentralization alone does not guarantee effective governance unless accompanied by clear accountability, communication, regulatory oversight, and institutional capacity. This conclusion aligns with Kapelela et al., who showed that decentralization reforms in secondary education may remain constrained when local authority is not supported by sufficient resources and clearly defined responsibilities (Kapelela et al., 2025). It also corresponds with research emphasizing network governance and horizontal cooperation across institutions as necessary complements to vertical administrative systems (Dovigo, 2024; Karimian et al., 2025). The strong expert support for provincial councils and regional consortia further suggests that intermediate governance structures may serve as important coordination mechanisms between national policy and school-level implementation.

The structural findings also underscore the increasing significance of digitalization and organizational agility. Indicators such as intelligent administration, knowledge management, streamlined information flows, technological adaptability, and equitable digital infrastructure received consistently favorable evaluations. In addition, experts introduced energy sustainability and the alignment of school architecture with national transformation priorities during the Delphi process, suggesting that contemporary educational governance must consider the physical and technological environment of schooling as part of institutional governance. This is consistent with studies demonstrating that technology increasingly shapes both educational administration and governance mechanisms (Abdallah et al., 2024). Research on e-governance likewise indicates that digital systems can improve efficiency, communication, accessibility, and transparency, provided that technological adoption is accompanied by adequate infrastructure and institutional readiness (Al-Busmait et al., 2025). More advanced governance models involving

artificial intelligence, blockchain, and data-driven systems similarly emphasize that educational management is moving toward integrated digital ecosystems (Gurram et al., 2025). At the same time, the present findings support the view that technological modernization should remain connected to public accountability and institutional goals rather than being treated as an independent technical intervention.

The policy dimension included coherence of upstream documents, rule of law, educational diplomacy, and standard-setting. The strong endorsement of policy operationalization, legal enforcement mechanisms, equitable educational opportunities, professional competency standards, and alignment between strategic priorities and budgets demonstrates that governance quality depends heavily on the consistency between policy formulation and implementation. Educational systems may possess ambitious strategic documents, yet their impact will remain limited where policies cannot be translated into operational programs or where legal and budgetary mechanisms are inconsistent. This finding is consistent with research on good policymaking in education, which stresses the importance of coherence among policy objectives, evidence, implementation capacity, evaluation, and accountability (Ahmadi et al., 2024). It also accords with evidence that effective policymaking requires sensitivity to intervening organizational and contextual factors that shape the implementation of educational decisions (Mohammadi et al., 2024). The Delphi addition concerning the absence of contradictions between laws approved by different policymaking bodies is particularly significant in this regard, because it reflects expert concern with legal coherence and institutional coordination within the governance system.

The findings concerning the rule of law and equity were among the strongest in the entire framework. Equity in educational opportunities for disadvantaged regions obtained one of the highest final Delphi ratings, while legal protection of teachers and students, enforcement of educational regulations, transparency in recruitment, and prevention of discriminatory resource distribution were also strongly supported. This suggests that educational governance is not merely about organizational effectiveness but also about legitimacy, fairness, rights, and public responsibility. The finding is compatible with democratic perspectives on educational governance that emphasize accountability, representation, and the legal foundations of public education (Yeargain, 2024). It also aligns with national research indicating that transparency, equity, accountability, responsiveness, and participation are central

elements of good governance in education (Pourkarimi & Ghamoushi, 2025). Moreover, the policy emphasis on equitable access is consistent with the broader sustainable-governance perspective, which links effective public institutions with inclusion and fairness (Undp, 2024). Thus, the current results suggest that educational governance cannot be judged solely by administrative efficiency; it should also be evaluated by how fairly educational opportunities, rights, and resources are distributed.

Educational diplomacy and standard-setting constituted another important aspect of the policy dimension. Indicators concerning international assessments, international educational standards, exchange with international organizations, and adaptation of educational content to emerging sciences remained in the final model. These findings reflect the increasing embeddedness of national education systems within global governance networks. Contemporary educational systems are influenced by cross-national assessments, international organizations, transnational policy discourse, and comparative standards (Elfert & Ydesen, 2024). However, the results also suggest that international engagement should be integrated with national priorities and contextual realities rather than adopted mechanically. This interpretation is consistent with critical studies showing that global governance mechanisms may introduce standardizing or market-oriented assumptions that do not always align with local educational values (Alexsandy et al., 2025). Accordingly, educational diplomacy in secondary education should function as a mechanism for learning, benchmarking, and capacity-building while preserving national policy coherence and contextual appropriateness.

The human dimension included meritocracy, teacher empowerment and well-being, distributed leadership, and professional ethics and commitment. The results showed especially strong support for salary adequacy, specialization-based managerial appointments, ethical conduct, protection of human dignity, privacy in teacher-student relationships, mutual trust, professional autonomy, and participation in decision-making. Experts also added a ranking system for school principals and knowledge-based in-service training during the Delphi rounds. These findings indicate that governance capacity is inseparable from the quality, motivation, professional competence, and ethical orientation of educational personnel. Human resources are not merely implementers of governance; they are active agents through whom policies are interpreted, adapted, and enacted. This interpretation is consistent with Jamali et al.,

who emphasized the importance of good-governance principles in designing effective human-resource programs for education systems (Jamali et al., 2025). It also corresponds with studies showing that the perspectives and interactions of school-level actors have a major influence on how governance arrangements function in practice (Hoang et al., 2024).

The prominence of distributed leadership and professional autonomy further indicates a shift away from exclusively hierarchical models of school administration. Shared decision-making, self-managed educational groups, mutual trust, delegation, collaboration, and support for teaching innovation were all retained following expert evaluation. Such findings are consistent with the wider transition toward collaborative and network-based governance structures (Karimian et al., 2025; Vahdani et al., 2026). They also complement evidence suggesting that modern educational governance increasingly constructs professional expectations and learning outcomes through shared standards and institutional accountability mechanisms (Ioannidou & Zarifis, 2026; Pesonen & Valkonen, 2025). The present results therefore indicate that effective secondary-school governance requires both professional accountability and meaningful professional agency. Excessive control may weaken initiative and innovation, whereas autonomy without standards and accountability may create inconsistency. The final framework suggests that effective governance lies in balancing these two requirements.

The participatory dimension incorporated family-centered governance, social responsibility, and social capital. The retention of indicators concerning meaningful parental involvement, transparency toward families, collaboration with NGOs and charitable actors, relationships with local businesses, utilization of alumni, public trust, and school–community integration demonstrates that secondary schools cannot be governed effectively as isolated bureaucratic units. Instead, schools operate within broader social ecosystems in which legitimacy and effectiveness depend partly on stakeholder relationships. This result is closely aligned with network-governance perspectives, which emphasize interdependence, collaborative resource mobilization, and horizontal relations among multiple actors (Dovigo, 2024; Gallagher et al., 2024). It also supports collaborative-governance research in the Iranian education context, where cooperation among governmental and non-governmental actors has been identified as an important mechanism for improving educational performance

(Vahdani et al., 2026). Public trust is particularly important because governance systems require legitimacy as well as formal authority. The retention of trust-related indicators indicates that schools and education authorities must not only perform effectively but must also be perceived as transparent, fair, and responsive.

The participatory findings may also be interpreted in light of emerging digital and platform-based governance. Digital systems have expanded the potential for communication among schools, parents, communities, and administrative authorities, yet they have simultaneously created new power relations around data, technological platforms, and private actors. Nichols and Dixon-Román argued that educational platforms increasingly influence policy and governance through technological infrastructures and the distribution of decision-making power (Nichols & Dixon-Román, 2024). Nichols and Thrall similarly highlighted the changing relationship between privatization, data, and educational governance (Nichols & Thrall, 2025). These concerns are relevant to the present study because stakeholder participation and transparency may increasingly occur through digital infrastructures. Consequently, participatory governance should include safeguards to ensure that digital tools expand access and communication without undermining privacy, public accountability, or institutional autonomy.

The economic dimension demonstrated that educational governance also requires sustainable, transparent, efficient, and equitable financial arrangements. The final Delphi results strongly emphasized distributive equity, including per-student funding based on deprivation, renovation funding for deteriorated schools, support for disadvantaged students, additional incentives for teachers in border regions, and equitable access to technology. These findings extend the economic dimension beyond conventional budgeting and cost control by positioning distributive justice as a core governance principle. This is consistent with national analyses that identify financial constraints, resource imbalances, and structural inefficiencies as major governance challenges in education (Khosh Eghbal Fard et al., 2025). It also aligns with studies emphasizing the feasibility of good-governance reforms within existing educational structures and the need to connect organizational design with resource capacity (Fazeli et al., 2026). The emphasis on resource diversification, performance-based budgeting, cost–benefit analysis, and transparency further suggests that the economic sustainability of educational

governance depends on both expanding available resources and improving their allocation and oversight.

The Delphi refinement process itself provides an additional insight into the nature of the proposed framework. The removal of seven indicators suggests that expert validation helped reduce redundancy and exclude concepts considered insufficiently distinctive or essential. Several rejected indicators concerned administrative simplification or forms of interinstitutional collaboration that may have overlapped conceptually with stronger retained indicators. Conversely, the addition of five indicators relating to environmental sustainability, school architecture, legislative coherence, principal ranking, and knowledge-based professional development indicates that expert judgment added context-sensitive considerations that were less visible in the literature synthesis. The convergence of ratings across the later Delphi rounds suggests that the model achieved satisfactory conceptual stability. Overall, the findings support the conclusion that secondary educational governance is an integrated configuration of structures, policies, professional capacities, stakeholder relationships, technology, accountability, and economic arrangements. This interpretation is compatible with systematic governance frameworks that caution against reducing governance to any single institutional mechanism (Asadzadeh et al., 2025; Rodrigues et al., 2025). It is also consistent with research emphasizing the need to dynamically reform secondary education systems in response to emerging societal and technological demands (Abbaspour, 2025; Bagheri Movahed et al., 2025).

The present study has several limitations that should be considered when interpreting its findings. First, although the meta-synthesis was conducted using a broad range of national and international databases, the final framework was necessarily dependent on the scope, quality, accessibility, and conceptual orientations of the studies available for inclusion. Relevant studies without accessible full texts or studies published outside the selected databases may therefore have been omitted. Second, qualitative coding and synthesis inevitably involve interpretive judgment, particularly when conceptually similar indicators are merged or assigned to higher-order components and dimensions. Third, the Delphi panel consisted of 18 experts, and although this number was sufficient to generate stable consensus, the judgments may not fully represent the perspectives of all stakeholder groups involved in secondary education. Teachers, students, parents, local administrators, private-school representatives, and community organizations may

assign different priorities to some governance indicators. Finally, the framework was developed primarily at the conceptual and expert-validation level and was not tested empirically across schools, educational districts, or provinces; therefore, its relationships with actual organizational performance, educational quality, equity, or student outcomes remain to be established.

Future studies should quantitatively validate the proposed framework using large and diverse samples drawn from school principals, teachers, educational administrators, policymakers, and other stakeholder groups. Exploratory and confirmatory factor analyses could be used to examine the dimensional structure of the model, while structural equation modeling could test causal relationships among structural, policy-related, human, participatory, and economic dimensions. Comparative studies across provinces, urban and rural settings, public and non-governmental schools, and different socioeconomic contexts would help determine whether the relative importance of governance dimensions varies by educational environment. Longitudinal research could also examine whether improvements in governance indicators predict subsequent changes in school effectiveness, teacher performance, student achievement, educational equity, organizational trust, and stakeholder satisfaction. Future qualitative studies should include students, parents, teachers, and local community actors to complement the expert perspective and identify governance issues experienced at the implementation level. Cross-national comparative research may additionally help distinguish context-specific indicators from more universal features of secondary educational governance.

Educational policymakers and administrators should use the identified framework as a diagnostic and planning tool for evaluating governance conditions at national, regional, district, and school levels. Reform initiatives should avoid concentrating on a single area such as decentralization or technology and instead coordinate structural redesign, policy coherence, professional development, stakeholder participation, accountability, and financial reform. Greater authority may be delegated to schools and regions while simultaneously establishing transparent reporting, performance monitoring, and complaint-handling mechanisms. Selection and promotion of educational managers should increasingly rely on professional competence, assessment systems, ethical criteria, and continuous development, while teachers should be provided with stronger professional autonomy, meaningful

participation in school decisions, fair compensation, and accessible in-service learning opportunities. Schools should strengthen regular and transparent engagement with families, community organizations, alumni, and local institutions and develop mechanisms for monitoring stakeholder satisfaction and public trust. Financial planning should prioritize deprived areas through equity-sensitive formulas, transparent expenditure systems, targeted renovation programs, and equitable technological investment. Finally, digital governance initiatives should be implemented within clear frameworks for privacy, accountability, accessibility, data protection, and public oversight so that technological modernization reinforces rather than weakens the educational, social, and ethical purposes of secondary schooling.

Authors' Contributions

Authors equally contributed to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

All procedures performed in studies involving human participants were under the ethical standards of the institutional and, or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

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