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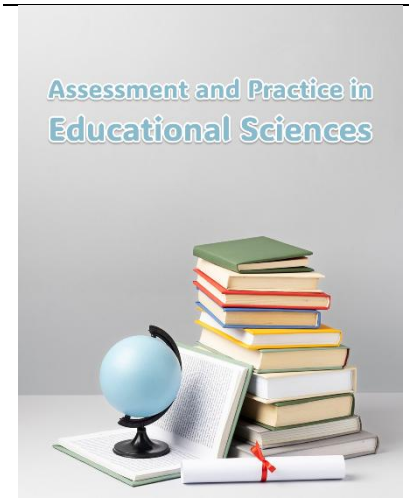

Identification of Effective Dimensions for Quality Improvement in Secondary Schools of Tehran

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ABSTRACT

The purpose of the present study is to identify the effective dimensions for quality improvement in secondary schools of Tehran. This research, in terms of purpose, is applied, and in terms of data collection method, was conducted using a mixed quantitative–qualitative approach. The statistical population in the qualitative part included experts in the field of educational management, and in the quantitative part included principals, teachers, and faculty members of Farhangian University in Tehran. To determine the sample size in the qualitative section, based on the principle of data saturation and using purposive sampling, 10 individuals were selected, while in the quantitative section, 364 individuals were chosen through random sampling based on Cochran's formula. The data collection instruments were interviews and questionnaires. The validity of the questionnaire in terms of face and content was confirmed by several experts. The reliability of the questionnaire was calculated using Cronbach's alpha, which was obtained as 0.86 for the entire instrument. For data analysis, the one-sample t-test was used in the quantitative section, and open and axial coding was applied in the qualitative section. The findings led to the identification of six dimensions from 24 concepts, which were labeled as follows: management and leadership, belief in collective wisdom, improvement of health, hygiene and safety in schools, empowerment of human resources, establishment of a teaching–learning system, and extracurricular activities. Furthermore, the calculated t-statistic in the section on executive mechanisms indicated that the obtained values, with a degree of freedom of 29 and an alpha of 0.05, were greater than the critical t-value. Therefore, there was a significant difference between the observed means and the population mean, and consequently, the 21 proposed executive mechanisms for improving the quality of secondary schools were confirmed by the research sample.

Keywords: quality improvement, schools, education, Tehran

Introduction

The quality of education is increasingly recognized as a cornerstone for sustainable development, social mobility, and economic competitiveness. In today's interconnected world, the improvement of secondary education systems is not only a domestic priority but also a global concern, given their central role in preparing future generations for higher education, the labor market, and active citizenship. Educational institutions face the dual challenge of maintaining relevance in rapidly changing social and economic contexts, while simultaneously aligning with broader national development goals. The broader

debate about quality improvement in education cannot be detached from the political and economic frameworks within which schools operate. National development plans and policies exert significant influence on the allocation of resources, the organization of schools, and the role of stakeholders. For example, studies on development planning in Iran reveal recurrent shortcomings in consistency, coherence, and adaptability across multiple decades of reform (1-3). Scholars have shown that, despite the existence of detailed plans, their translation into effective practice is often hindered by structural weaknesses in policymaking processes and by a lack of integration with institutional and cultural realities (4, 5). Such weaknesses resonate with challenges found in other policy arenas, including trade and economic development, where the absence of institutional cohesion or the failure to anticipate external shocks often undermines progress (6-8).

At the same time, education is increasingly shaped by global transformations. Internationalization has emerged as a prominent strategy for enhancing educational quality, particularly in higher education, but the lessons are also relevant for secondary schools. In the European context, university strategies reveal the complex interplay between internationalization, spatial identity, and educational quality (9). Similar dynamics can be observed in Vietnam, where university leaders consider internationalization as a key driver for advancing the quality of teaching and research (10). Comparative perspectives from Turkey show that the rapid expansion of higher education raises dilemmas between access and quality, requiring policymakers to balance citizen-centered needs with systemic constraints (11). These insights underscore the fact that educational quality is not a static concept but a socially constructed and context-dependent notion, shaped by both domestic imperatives and global pressures.

Secondary schools, which occupy the pivotal stage between primary education and higher education, serve as the foundation for quality enhancement across the educational system. Leadership at this level is particularly critical. Research demonstrates that the strategies and practices of school principals play a decisive role in promoting educational quality, shaping teacher collaboration, and fostering an environment conducive to student achievement (12). Teacher-related factors also have a direct impact. A meta-analysis of teacher efficacy shows that teachers' confidence in their professional abilities is one of the most important predictors of educational quality, influencing student engagement, motivation, and academic performance (13).

The COVID-19 pandemic further highlighted both the vulnerabilities and the opportunities for educational systems worldwide. The abrupt shift to online learning illustrated how technological solutions can mitigate disruptions, while also revealing deep inequalities in access and quality (14). In many cases, digital tools enabled cost reduction and broader accessibility, but their effectiveness depended on institutional readiness, leadership commitment, and teacher capacity. Digitalization is not limited to pedagogy; it also affects governance and accountability mechanisms. For instance, research on digital transformation in auditing indicates how new technologies can enhance transparency and oversight in organizational systems, lessons that are transferable to educational administration (15).

Policy environments exert profound influence on schools' ability to improve quality. Studies on Iran's education and economic policymaking illustrate how government interventions often fail to align effectively with institutional goals, creating gaps between strategic vision and operational reality (16, 17). The pathology of policy systems, as identified in higher education, reveals structural inefficiencies that impede adaptability and responsiveness (4, 18). Such findings resonate with broader concerns about economic policymaking, where uncertainty and inconsistency in trade and fiscal policies generate instability and limit sustainable growth (19-21). Lessons from trade policy and economic governance provide valuable analogies: just as clear, stable, and well-coordinated economic policies foster resilience and investment, coherent and participatory educational policies are essential for long-term quality improvement in schools.

Global economic transformations also provide context for educational reforms. The implementation of free trade zone policies, for instance, illustrates how institutional frameworks can either strengthen or weaken systemic performance. Evidence

from Indonesia, China, and Vietnam shows that such policies can improve efficiency and competitiveness, provided they are accompanied by clear governance structures and accountability mechanisms (22-24). Analogously, schools require structured and transparent frameworks to implement reforms effectively. Moreover, the integration of artificial intelligence into global trade and economics offers a powerful model for education. Predictive modeling and optimization methods, used for policy planning in economics, may also inform data-driven approaches to curriculum design, student assessment, and school management (25).

The notion of resilience is central to both economic and educational systems. In economics, resilience has been linked to the capacity of financial and institutional systems to adapt under uncertainty (20, 21). In education, resilience depends on the ability of schools to anticipate and overcome challenges such as resource scarcity, social inequalities, and rapid technological change. Comparative studies of Iran's development programs emphasize that adaptability and contextual sensitivity are key to bridging the gap between policy design and implementation (2, 3). These insights are directly applicable to secondary schools, where rigid bureaucratic systems often hinder the flexibility needed for genuine quality improvement.

Stakeholder participation emerges as another recurring theme across multiple domains. In economic planning, engaging diverse actors in decision-making processes enhances the legitimacy and feasibility of policies (6, 7). Similarly, in education, parental involvement, teacher collaboration, and student participation are repeatedly identified as critical factors in improving school performance (12, 13). International perspectives confirm this: in Europe and Asia, universities that effectively integrate stakeholder voices into strategic planning demonstrate stronger alignment between goals and outcomes (9, 10).

Leadership and governance remain central to educational quality improvement. While macro-level policy frameworks set the boundaries of reform, it is at the micro level of schools that change is most directly felt. Studies of leadership strategies in successful schools emphasize the importance of distributed leadership, continuous professional development, and the cultivation of collaborative cultures (12). Policy studies likewise stress that leadership is essential not only for managing day-to-day operations but also for interpreting and translating national development goals into actionable strategies within schools (5, 26).

In this context, the quality improvement of secondary schools in Tehran must be viewed as part of a broader national and global landscape of educational reform. The lessons from development planning, trade policy, and internationalization all point to the importance of coherence, participation, adaptability, and leadership. However, while much research has addressed macroeconomic and higher education policies, there remains a significant gap in systematically identifying and operationalizing the dimensions that can specifically enhance the quality of secondary schools.

Therefore, the present study aims to fill this gap by identifying and analyzing the effective dimensions for improving the quality of secondary schools in Tehran.

Methods and Materials

In terms of purpose, this research is applied. In terms of data collection, it was conducted using a mixed quantitative–qualitative approach. The statistical population in the qualitative section included experts in the field of educational management, while in the quantitative section it consisted of 30 principals, teachers, and faculty members of Farhangian University in Tehran, who were selected through purposive sampling. (The purpose of selecting the sample in the quantitative part, which pertained to the executive mechanisms for quality improvement in secondary schools, was to ensure the selection of experts who, due to their theoretical and practical knowledge in the field under study, had more comprehensive information.) In the qualitative section, the population also included 10 experts in the field of school educational management. Purposive sampling was used, and based on the theoretical saturation index, the sample size in this part was determined to be 10

individuals (of which 4 were university professors, 2 were heads of the Department of Education, 3 were school principals, and 1 was a teacher. Among them, 3 held doctoral degrees, 5 had master's degrees, and 2 had bachelor's degrees. In terms of gender, 7 were male and 3 were female. All of these individuals had more than 10 years of service experience in the educational system).

In the qualitative part of the research, the tool used to identify the dimensions of quality improvement in secondary schools was the interview, in which the following questions formed the basis, while additional questions were raised during the sessions:

1. What is your definition of an effective school?
2. In your opinion, what activities should be undertaken to improve school quality?
3. How can schools be guided toward quality improvement?
4. What are the challenges and obstacles to quality improvement in schools, and why?
5. How can the challenges and obstacles to school quality improvement be resolved?
6. What is your strategy for operationalizing quality improvement in schools?

In addition to the questions raised, during the interviews with the participants, new issues were also discussed, and the dimensions that achieved collective consensus were selected. In the quantitative section of the research, the tool used was a questionnaire, which was designed by the researcher based on the theoretical foundations, prior research, and the dimensions identified in the qualitative section. The questionnaire was structured on a five-point Likert scale (very low = 1, low = 2, neutral = 3, high = 4, very high = 5).

To determine the validity of the questionnaire, face and content validity were employed. For this purpose, a version of the questionnaire was provided to several experts in the field in order to ensure its localization and appropriateness for the cultural and social conditions of the region. After incorporating their corrective comments and ensuring that the statements of the questionnaire measured all the intended attributes of the research, its face and content validity were confirmed. The reliability of the questionnaire was measured using Cronbach's alpha via SPSS statistical software, which was calculated as 0.86 for the entire instrument.

The categorization of the questionnaire items regarding the executive mechanisms for quality improvement in secondary schools included one main question for presenting the mechanisms of quality improvement, for which 21 mechanisms were proposed. For data analysis, the one-sample t-test was used in the quantitative section, while open and axial coding was employed in the qualitative section.

Findings and Results

The findings of this study are presented based on the qualitative analysis of interviews with educational management experts, principals, teachers, and faculty members. Using open and axial coding, the main categories and subcategories contributing to the quality improvement of secondary schools in Tehran were extracted. The analysis led to the identification of six key dimensions that encompass 24 concepts, reflecting the perspectives of participants. These dimensions include management and leadership, belief in collective wisdom, promotion of health, hygiene and safety in schools, empowerment of staff, establishment of a teaching and learning system, and extracurricular activities. Table 1 illustrates the open and axial coding process derived from interview data.

Table 1. Open and Axial Coding

Interviewer's code	Axial coding	Open coding
A1, A2, A5, A10	Management and leadership	Creating conditions for the growth of creativity of staff and teachers
A1, A4, A5, A6, A9		Human relations
A2, A5, A8, A10		Observance of administrative ethics

A1, A2, A3, A5, A8, A9		Paying attention to the payment system and the welfare of employees and teachers
A2, A5, A6, A8, A9	Belief in collective wisdom	Parent participation in educational and training process
A1, A2, A4, A6, A8, A9		Use parents' capabilities
A1, A2, A4, A7, A8		Bilateral collaboration of staff, teachers, and students
A1, A3, A4, A7, A10	Promote health, hygiene and safety at school	The importance of school to the principles of health
A5, A7, A10		Create standard physical conditions in school
A2, A3, A7, A9		Create a happy atmosphere in the classroom
A1, A7, A10		Control abnormalities, violence, and aggression in school
A2, A5, A6, A7	Empowering staff	Promoting the culture of reading
A2, A3, A4, A6		Lesson study
A1, A2, A3		Action research
A1, A3, A4, A6, A7, A9		Creating a researcher spirit
A3, A5, A6, A9, A10		Applying varied and new teaching methods
A1, A3, A7, A10	Establishment of a teaching and learning system	Classroom management
A5, A6, A7, A8, A9, A10		Student participation in learning activities
A1, A6, A9		Attract students' attention to the lesson
A2, A5, A6, A7, A9		Increase learning by using information technology
A1, A5, A7, A8, A9, A10	Extracurricular activities	Performing artistic competitions
A1, A2, A5, A7, A9, A10		Doing exercise activities
A2, A5, A10		Holding an exhibition of handmade products for students
A2, A3, A4, A7, A9, A10		Entrepreneurial attitude in school

The first major category identified was management and leadership, which emphasized the importance of fostering conditions that promote the creativity of staff and teachers. Participants also highlighted the necessity of strengthening human relations within schools, ensuring the observance of administrative ethics, and addressing the financial and welfare needs of employees and teachers. Together, these factors demonstrate that effective leadership is not only about directive authority but also about cultivating an environment where creativity, fairness, and employee satisfaction are valued.

The second category, belief in collective wisdom, pointed to the significance of collaboration among parents, teachers, and students. Parent participation in both educational and training processes, as well as the effective use of parents' capabilities, were identified as crucial elements. Additionally, bilateral collaboration among staff, teachers, and students was regarded as a key mechanism for reinforcing participatory culture. This suggests that schools cannot function effectively in isolation but require broad-based engagement from all stakeholders.

The third category, promotion of health, hygiene, and safety in schools, encompassed multiple aspects such as adherence to health principles, creating standard physical conditions within the school environment, fostering a happy and lively classroom atmosphere, and controlling behavioral abnormalities, violence, and aggression. These findings underline the notion that quality education is inseparable from the physical, emotional, and psychological well-being of students and staff.

The fourth category, empowerment of staff, included the promotion of a reading culture, engaging in lesson study, conducting action research, nurturing a research-oriented spirit, and applying diverse and innovative teaching methods. These findings emphasize that teacher empowerment directly contributes to instructional quality and sustainable educational development. By equipping teachers with advanced pedagogical skills and research competencies, schools can ensure continuous improvement in the learning process.

The fifth category, establishment of a teaching and learning system, identified classroom management, active student participation in learning activities, strategies for attracting students' attention to lessons, and the integration of information technology in the learning process as critical components. This dimension reflects the need for a structured and interactive instructional framework that simultaneously manages classroom dynamics and incorporates modern technological tools to enhance learning outcomes.

Finally, the sixth category, extracurricular activities, was recognized as a vital aspect of quality improvement. Activities such as artistic competitions, exercise and sports activities, exhibitions of handmade student products, and fostering an entrepreneurial mindset in schools were highlighted. These activities not only contribute to student engagement and motivation but also prepare learners for real-life challenges by cultivating creativity, teamwork, and innovation.

In the quantitative part of the study, a one-sample *t*-test was conducted to examine the degree of agreement of participants regarding the executive mechanisms proposed for quality improvement in secondary schools. The test compared the observed mean scores against the community average of 3 (the neutral point on the Likert scale). The results, presented in Table 2, indicate that in all cases the observed mean was significantly higher than the average community value, with $p < .05$, demonstrating strong agreement among respondents regarding the effectiveness of the proposed mechanisms.

Table 2. One-Sample *t*-Test Results for Executive Mechanisms of Quality Improvement

Executive mechanisms	Average	Standard deviation	*t*	df	Sig.
Helping students to learn skills	4.77	0.277	34.943	29	.000
Promoting business culture and entrepreneurship by implementing teamwork	4.76	0.420	22.932	29	.000
Conduct competitions and cultural arts programs continuously	4.58	0.582	14.870	29	.000
Implementation of educational and training needs in schools and planning to reinforce and fill these gaps	4.71	0.479	19.603	29	.000
Creating an atmosphere of morale and motivation in manpower	4.75	0.462	20.717	29	.000
Design of reward system based on performance	4.68	0.559	16.483	29	.000
Applying optimal human relationships between employees, students and parents, and using stakeholder participation in programs	4.73	0.306	30.978	29	.000
Determine the micro and macro goals and optimal planning for achieving these goals	4.65	0.569	15.870	29	.000
Emphasizing teachers' use of modern and interactive teaching methods	4.67	0.436	20.917	29	.000
Developing and equipping schools with technology, laboratories, and libraries	4.79	0.297	33.004	29	.000
Identify the needs of the audience and plan for meeting these needs	4.58	0.582	14.870	29	.000
Pay attention to the standards of design, space, equipment, and safety of the school	4.75	0.462	20.717	29	.000
Make school enjoyable with morning exercises and fun activities	4.81	0.418	23.773	29	.000
Implementation of self-care education plan for students and parents	4.70	0.422	22.080	29	.000
Extending stakeholder participation in diverse school activities based on their specialized abilities and skills	4.82	0.265	37.583	29	.000
Creating changes in the organization of the parent association and coaches at school and enriching forums	4.76	0.447	21.517	29	.000
Doing quality enhancement in teachers' council and student council	4.71	0.546	17.189	29	.000
Encourage and strengthen capable and competent forces	4.77	0.277	34.943	29	.000
Teachers' participation in regular in-service programs	4.68	0.560	16.390	29	.000
Formation of research teams at school	4.78	0.445	21.863	29	.000
Conduct peer-to-peer coordination and monitoring sessions for teachers and staff	4.74	0.534	17.885	29	.000

The analysis showed that all 21 proposed executive mechanisms for quality improvement in secondary schools had mean values significantly higher than the neutral benchmark of 3, with significance levels at $p < .001$. Among these mechanisms, extending stakeholder participation in diverse school activities received the highest mean score ($M = 4.82$, $SD = 0.265$), followed closely by making school enjoyable with morning exercises and fun activities ($M = 4.81$, $SD = 0.418$) and developing and equipping schools with technology, laboratories, and libraries ($M = 4.79$, $SD = 0.297$). This suggests that stakeholders consider broad participation, recreational engagement, and adequate facilities as the most critical components of quality improvement.

Similarly, mechanisms such as helping students to learn skills (M = 4.77, SD = 0.277) and encouraging and strengthening capable and competent forces (M = 4.77, SD = 0.277) also scored very highly, highlighting the role of skill development and human resource empowerment in school advancement.

Other mechanisms, such as designing a reward system based on performance (M = 4.68, SD = 0.559) and teachers' participation in regular in-service programs (M = 4.68, SD = 0.560), while slightly lower, still demonstrated significant support, indicating that professional motivation and continuous training are essential yet somewhat less emphasized compared to broader structural and participatory initiatives.

Overall, the statistical results confirm that there is strong consensus among participants on the importance of these mechanisms, with all *t*-values exceeding critical thresholds, thereby validating the comprehensive framework of executive strategies for enhancing the quality of secondary schools in Tehran.

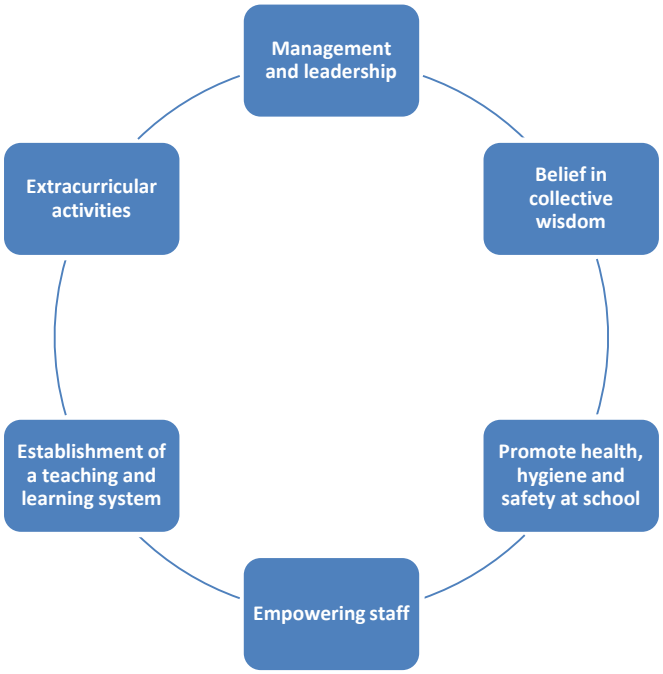

Figure 1. Final Model of the Study

Discussion and Conclusion

The present study sought to identify and analyze the dimensions that contribute to the quality improvement of secondary schools in Tehran, using a mixed-methods approach. Findings from qualitative coding revealed six overarching dimensions—management and leadership, belief in collective wisdom, promotion of health and safety in schools, empowerment of staff, establishment of a teaching and learning system, and extracurricular activities. Quantitative validation through a one-sample *t*-test demonstrated that 21 executive mechanisms linked to these dimensions were strongly supported by participants, with all mean values significantly higher than the neutral benchmark. These results offer insights into how systemic reforms, contextualized strategies, and stakeholder engagement can foster educational quality in secondary schools.

The first major finding was the significance of management and leadership in shaping school quality. Effective leadership was linked to creativity promotion, human relations, observance of ethics, and employee welfare. This aligns with research that underscores the critical role of principals and school leaders in driving educational quality through distributed leadership and participatory decision-making (12). Moreover, higher education literature reinforces that strategic leadership is indispensable in interpreting development goals and translating them into actionable school-level practices (9, 10). Policy frameworks also

stress the necessity of leadership coherence and adaptability, noting that weaknesses in policymaking systems often hinder school-level execution (4, 5). Thus, the results confirm that leadership remains the cornerstone of quality improvement efforts in secondary schools.

The second dimension, belief in collective wisdom, emphasized parental participation, the use of parents' capabilities, and collaboration among teachers, students, and staff. This resonates with stakeholder-based perspectives in education, which argue that active involvement of parents and communities strengthens accountability and ensures alignment between school activities and social expectations (12, 13). Similar findings in economic policymaking suggest that institutional resilience and effectiveness are enhanced when diverse voices are included in planning and implementation (6, 7). International comparisons further support the notion that stakeholder engagement is not confined to education: in European and Asian universities, internationalization strategies achieved more sustainable outcomes when rooted in participatory processes (9, 10). Therefore, the Tehran case reinforces a global pattern: inclusive participation is a prerequisite for genuine quality improvement.

The third dimension, promotion of health, hygiene, and safety in schools, encompassed aspects such as adherence to health principles, safe physical environments, cheerful classroom climates, and control of violence. This is consistent with the growing body of research linking student well-being to educational quality. Schools that ensure safe and supportive environments are better positioned to cultivate student motivation and engagement, thereby enhancing learning outcomes (13). The importance of health and safety standards can be analogized to economic resilience frameworks, where stable and predictable environments reduce uncertainty and promote sustainable growth (20, 21). In both domains, the presence of robust safety nets—whether institutional or educational—enables participants to thrive.

Another crucial finding was the role of staff empowerment through professional development, lesson study, action research, and innovative teaching methods. Teacher efficacy has long been recognized as a core determinant of educational success, and meta-analyses confirm its centrality in shaping student achievement (13). The results of this study resonate with global experiences where teacher development programs significantly improve instructional quality (14). Moreover, continuous professional development fosters adaptive capacity, akin to how institutions that embrace ongoing reform remain resilient against shocks (2, 3). Hence, empowering teachers with resources, autonomy, and professional growth opportunities is indispensable for advancing educational quality.

The fifth dimension, establishment of a teaching and learning system, highlighted classroom management, student participation, student engagement, and the integration of information technology. This is consistent with broader evidence suggesting that interactive and technology-integrated pedagogy enhances both engagement and learning efficiency (14, 15). International perspectives support this view: universities in Europe and Vietnam have emphasized interactive teaching as a critical driver of educational quality (9, 10). In economic policymaking, similar parallels exist: coherent and systematic frameworks enhance performance outcomes, just as structured teaching systems yield better educational results (16, 17). The findings therefore confirm that quality education cannot be achieved without robust pedagogical systems supported by technology and student-centered practices.

Finally, extracurricular activities emerged as a key driver of quality improvement. Activities such as artistic competitions, sports, exhibitions, and entrepreneurial projects were considered essential to student engagement and holistic development. These findings align with international perspectives that emphasize the role of extracurriculars in cultivating skills beyond academics, including creativity, teamwork, and leadership (12, 13). From a policy perspective, this reflects the need for multidimensional quality frameworks that value both academic and non-academic outcomes (11). Just as economic diversification is critical for sustainable development (22-24), extracurricular diversification broadens the scope of learning and prepares students for complex societal challenges.

The quantitative findings of this study, which demonstrated significant agreement among participants on all 21 executive mechanisms, provide strong validation for the qualitative results. Mechanisms such as equipping schools with technology, extending stakeholder participation, fostering motivation, and supporting skill development were rated highest. These outcomes mirror findings in higher education, where internationalization, digitalization, and stakeholder integration are central to quality enhancement (9, 10, 15). They also align with lessons from economic policy: clarity, participation, and coherence increase institutional efficiency (4, 18, 19). The convergence of findings across sectors underscores the universal value of participatory, adaptive, and innovation-oriented approaches to systemic improvement.

In sum, the results of this study confirm that improving the quality of secondary schools requires a holistic framework that integrates leadership, participation, well-being, empowerment, pedagogy, and extracurricular enrichment. These findings echo international evidence while providing context-specific insights for Tehran. They also highlight the broader interconnections between education, economic policy, and institutional development, reinforcing the idea that schools are embedded in wider socio-political and economic ecosystems.

This study has several limitations. First, the research was limited to secondary schools in Tehran, which may restrict the generalizability of findings to other regions of Iran or to international contexts with different cultural and institutional characteristics. Second, the qualitative sample, although purposively selected and sufficient for theoretical saturation, involved only 10 experts, which may not capture the full diversity of perspectives in the educational system. Third, the quantitative sample, while statistically sound, was constrained to a relatively small group of 30 participants, limiting the robustness of inferential generalizations. Finally, as with all self-report methods, interviews and questionnaires are susceptible to bias, including social desirability and selective recall, which may have influenced responses.

Future research should expand the geographical scope of the study to include rural schools and other provinces in Iran to assess whether the identified dimensions are consistent across diverse contexts. Comparative studies with other countries in the region could also enrich understanding by highlighting cultural and systemic differences in school quality improvement. In addition, longitudinal research would provide valuable insights into how quality improvement initiatives evolve over time and their long-term effects on student outcomes. Employing mixed-method designs with larger and more representative samples could enhance both the validity and generalizability of findings. Future studies should also explore the role of emerging technologies, such as artificial intelligence and digital platforms, in transforming teaching, leadership, and stakeholder engagement within schools.

In practice, policymakers and school leaders should prioritize the six identified dimensions as a comprehensive framework for quality improvement. Leadership training and capacity-building programs should be designed to strengthen principals' ability to foster creativity, manage human relations, and ensure staff welfare. Schools should institutionalize participatory mechanisms to involve parents, teachers, and students in decision-making. Investment in health, safety, and physical infrastructure is critical to ensuring supportive learning environments. Teacher empowerment should be pursued through continuous professional development, action research, and access to innovative pedagogical tools. At the classroom level, schools must establish systematic teaching and learning practices that incorporate technology and foster student participation. Finally, extracurricular activities should be integrated into school programming as essential—not peripheral—components of holistic education. By implementing these practices, secondary schools in Tehran can move toward sustainable quality improvement that meets both local needs and global standards.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adheried in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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