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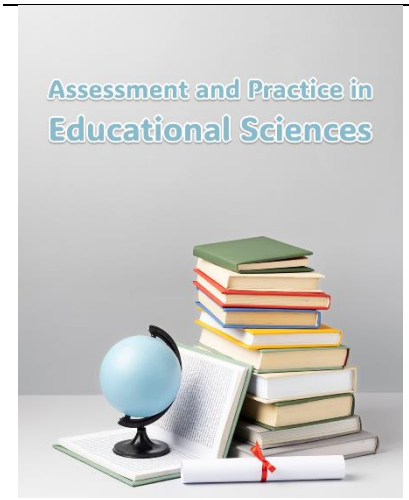

Identifying the Dimensions, Components, and Indicators of an Organizational Learning Model Based on Multiple Intelligences in Iranian Schools

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ABSTRACT

The objective of this study was to identify the dimensions, components, and indicators of an organizational learning model based on multiple intelligences in Iranian schools. This research employed a sequential exploratory mixed-methods design consisting of qualitative and quantitative phases. In the qualitative phase, a meta-synthesis of prior studies and semi-structured interviews with educational experts, teachers, and school administrators were conducted to extract organizing and basic themes using thematic analysis with open and axial coding. Data sources included interview transcripts, written reflections, observational notes, and theoretical literature. In the quantitative phase, a questionnaire was developed based on the qualitative findings and administered to a broader sample of school teachers and administrators. The psychometric properties of the scale were evaluated, and structural equation modeling (SEM) was used to examine the relationships among the identified components and validate the proposed model of organizational learning based on multiple intelligences. Inferential analyses demonstrated that the proposed organizational learning model exhibited strong validity and reliable fit indices within SEM. All three global constructs—empowering learning environment, capacity building for sustainable organizational learning, and educational leadership based on multiple intelligences—significantly predicted organizational learning outcomes. Path coefficients indicated that leadership based on multiple intelligences had the strongest direct effect on organizational learning, followed by capacity-building mechanisms and learning environment variables. Subscale analyses confirmed that components such as psychological safety, experiential learning, use of feedback and data, and intelligence-based leadership competencies significantly contributed to the predictive power of the model. The study concludes that organizational learning in schools is strengthened when environments support collaboration, reflective practice, psychological safety, and technology-enhanced instruction, and when leaders integrate multiple intelligences into communication, decision-making, and instructional guidance. The validated model provides a comprehensive framework for improving learning culture, professional development, and organizational effectiveness in Iranian schools.

Keywords: Organizational learning; Multiple intelligences; Educational leadership; Thematic analysis; Structural equation modeling; School improvement; Learning environment.

Introduction

The concept of organizational learning has emerged as a central pillar in contemporary educational reform, particularly as schools confront rapid sociocultural, technological, and pedagogical transformations. As education systems move toward learner-centered, dynamic, and adaptive models of instruction, the capacity of schools to cultivate organizational learning becomes essential for sustaining effectiveness, innovation, and responsiveness. To understand organizational learning in its

fullest sense, scholars have increasingly emphasized the interaction between human capacities, learning environments, leadership practices, and the diverse cognitive profiles of learners and educators. Within this landscape, Howard Gardner's theory of multiple intelligences has offered a transformative conceptual foundation for rethinking how learning occurs, how it is supported, and how educational organizations harness the strengths of diverse stakeholders. This conceptual link between multiple intelligences and organizational learning has become increasingly prominent in empirical research across global educational contexts.

Across diverse educational settings, the theory of multiple intelligences has been used to enhance instructional design, improve student performance, diversify classroom engagement, and deepen pedagogical innovation. For example, applications of multiple intelligence strategies have been shown to strengthen writing skills among elementary school learners, promoting creativity and cognitive flexibility (1). Other studies highlight the potential for intelligence-centered pedagogy in supporting learners with exceptional abilities or unique educational needs. For instance, research conducted in Saudi Arabia demonstrates that teachers' understanding of differentiation in mixed-ability classrooms enhances inclusion and learner success (2). At the early childhood level, the use of multiple intelligence-based models of learning fosters holistic development and strengthens cognitive, emotional, and social capabilities (3). These findings collectively demonstrate the relevance of multiple intelligences for advancing pedagogical practice.

A growing body of research also confirms that organizational and systemic applications of multiple intelligences can support broader educational aims. For example, the integration of Gardner's framework into school practices contributes to improved learning environments, enhanced collaboration, and sustained professional development among teachers (4). Research on working memory and personal intelligences further demonstrates how diverse cognitive capacities relate to academic performance and student adaptability (5). Moreover, integrated music education has been shown to support not only creative development but also essential traits such as self-control and integrity among university students, demonstrating that multiple intelligences extend beyond primary and secondary education into higher education contexts (6).

The importance of understanding learners' cognitive diversity is further emphasized by research on learning styles, which highlights the role of diagnosing individual learning orientations as a tool for improving classroom practices and overall learning processes (7). Studies have also identified how multiple intelligences guide curriculum design in religious, linguistic, and interdisciplinary contexts. For instance, the integration of multiple intelligences in Islamic education promotes more meaningful, personalized learning experiences (8). Similarly, the use of multiple intelligences in physics instruction helps students engage more deeply with complex scientific concepts (9). These studies collectively indicate that multiple intelligences play a crucial role in enriching learning environments and accommodating the individuality of learners.

From an organizational and pedagogical standpoint, multiple intelligences also shape teacher practices and instructional design. Research suggests that teachers' assessment procedures directly influence students' academic performance, underscoring the need for assessment approaches that account for cognitive diversity (10). Within schools, the use of interest centers inspired by Gardner's theory promotes engagement and autonomy among learners (11). Meanwhile, studies in early childhood and primary education indicate that differentiated instruction based on multiple intelligences strengthens foundational skills, problem-solving capacities, and social-emotional competencies (12). The psychological development of students also appears to be significantly influenced by classrooms that apply differential approaches aligned with students' diverse cognitive strengths (13). This aligns with research highlighting the value of multimodal learning and multimodal analytics in supporting different types of intelligence, including visual, auditory, and kinesthetic domains (14).

Applications of multiple intelligences have also been explored extensively in language learning. For example, the incorporation of folklore and cultural narratives in Omani EFL classrooms effectively utilizes interpersonal, linguistic, and

intrapersonal intelligences to enhance learners' engagement and comprehension (15). Similarly, EFL teachers working with disadvantaged students have found that leveraging multiple intelligences helps compensate for resource limitations and enhances learning outcomes (16). In Indonesian madrasah contexts, multiple intelligence-based instructional models have improved teacher performance and professional practice (17). Additionally, studies of special education underscore how multiple intelligences can be applied to support students with visual impairments, reinforcing the adaptability and inclusiveness of the framework (18). In Azerbaijan, research on gifted students illustrates how differentiated biology instruction addresses learners' unique cognitive profiles and promotes talent development (19).

From a broader pedagogical lens, multiple intelligences can be used to foster learner-centered instruction in diverse cultural and academic settings. For instance, integrated approaches that combine learning styles and multiple intelligences reinforce student autonomy, curiosity, and resilience (20). Similarly, Indonesian research demonstrates that multiple intelligence-based English instruction promotes deeper engagement and richer learning experiences (12). Moreover, the alignment of curriculum materials—such as the Al-Arabiyyah Lil 'Alam educational series—with Gardner's framework ensures that instructional content meets learners' diverse cognitive needs (21). The relevance of multiple intelligences for improving early childhood learning, promoting differentiated instruction, and guiding curriculum design makes it a powerful tool for educational improvement.

Despite substantial global research on multiple intelligences, the organizational implications of this theory—particularly its role in shaping organizational learning—remain underexamined, especially within the sociocultural and institutional context of Iranian schools. Organizational learning involves not only the cognitive and behavioral development of individuals but also the capacity of the school as a system to learn, adapt, share knowledge, and innovate. The interplay between individual intelligences, leadership practices, learning environments, professional collaboration, and school culture shapes how organizational learning emerges and evolves. These dimensions align closely with research indicating that multiple intelligences can guide teacher professional development, improve instructional communication, and strengthen leadership performance (3, 14, 17). However, empirical studies linking multiple intelligences to organizational learning models remain limited, and few have attempted to conceptualize a comprehensive predictive model linking these domains.

In the Iranian educational system, issues such as centralized governance, limited teacher autonomy, uneven access to professional development, and challenges in instructional innovation highlight the urgent need for frameworks that enhance organizational learning at the school level. Multiple intelligences offer a conceptual pathway for developing leadership capacities, creating psychologically safe learning environments, improving collaboration among teachers, and promoting reflective and experiential learning practices. The global literature suggests that schools that integrate diverse intelligence strengths—particularly through leadership practices—increase their capacity to share knowledge, support innovation, and sustain long-term organizational improvement (4, 5, 20). Yet, a systematic framework for applying this approach within Iranian schools has not been established. This gap underscores the relevance of developing a model that integrates organizational learning with the principles of multiple intelligences.

Given the multiplicity of evidence across cultures, disciplines, and educational levels, it is increasingly clear that organizational learning cannot be separated from the cognitive diversity of individuals within the organization. Multiple intelligences shape how teachers teach, how students learn, how leaders manage change, and how knowledge circulates within the school community. The integration of learning environment factors, capacity-building mechanisms, leadership intelligence profiles, and organizational structures offers a comprehensive, evidence-based framework for improving school performance and adapting to contemporary educational demands. However, current Iranian research has not yet synthesized these dimensions into a coherent organizational learning model.

Therefore, the aim of this study is to identify the dimensions, components, and indicators of an organizational learning model based on multiple intelligences in Iranian schools.

Methods and Materials

This study employed a sequential exploratory mixed-methods design, beginning with an in-depth qualitative phase followed by a quantitative validation stage. The qualitative phase focused on identifying, understanding, and conceptualizing the dimensions, components, and indicators of organizational learning based on multiple intelligences within the context of Iranian schools. In this phase, a meta-synthesis approach was first used to review, screen, and synthesize existing scholarly literature and research related to organizational learning and multiple intelligences. Through a systematic search process, relevant empirical and theoretical studies were identified, and underlying concepts, patterns, and categories associated with the phenomenon were extracted. As is common in qualitative research, this stage produced numerous preliminary codes and conceptual themes.

Following the literature-based meta-synthesis, field data collection was conducted through semi-structured interviews with experts, specialists, and knowledgeable practitioners familiar with organizational learning and educational systems in Iran. Participants were selected purposively based on their expertise and willingness to contribute. Interviews continued until the required conceptual saturation was achieved, ensuring that no new substantive themes were emerging. The qualitative participants included educational managers, experienced teachers, researchers in educational psychology, and scholars with expertise in Howard Gardner's theory of multiple intelligences and organizational development.

The quantitative phase was then conducted to examine the structural relationships between the concepts identified qualitatively. To achieve this, a questionnaire was developed based on the qualitative findings and distributed among a larger sample drawn from the population of teachers and school administrators in Iranian schools. The aim of this stage was to test the predictive model of organizational learning based on multiple intelligences using structural equation modeling and to validate the conceptual framework generated during the qualitative phase.

Data collection relied on both library-based and field-based methods. In the qualitative stage, data were collected through semi-structured interviews designed to elicit rich, interpretive insights from participants. These interviews allowed respondents to describe their experiences, perspectives, and professional judgments regarding the role of multiple intelligences in shaping organizational learning processes within schools. Whenever necessary, the researcher revisited interview notes and audio recordings to ensure the accuracy and completeness of extracted concepts. The interview protocol followed open-ended guiding questions to promote depth while also maintaining consistency across participants.

Additionally, document analysis of previous studies, research reports, theoretical sources, and empirical findings played a crucial role in forming the initial coding framework. This included examining conceptual literature on organizational learning, models of learning in educational settings, and the theoretical foundations of multiple intelligences. These sources enabled the researcher to develop a preliminary understanding of potential components before engaging with field experts.

For the quantitative stage, a structured questionnaire was designed based on the themes, dimensions, and indicators obtained through meta-synthesis and thematic analysis. The questionnaire measured variables related to organizational learning and the various domains of multiple intelligences. After validation by experts and pilot testing for clarity and reliability, the final version was distributed to the study sample. Respondents completed the instrument voluntarily, and the collected data formed the basis for quantitative modeling.

Qualitative data were analyzed using thematic analysis, a method suited for identifying, examining, and interpreting patterns within textual data. Consistent with established procedures, qualitative data were first transcribed and reviewed repeatedly to

achieve familiarity and depth of understanding. The analysis began with open coding, during which meaningful units of data were labeled and initial concepts were extracted. These preliminary codes reflected both manifest and latent content, providing a basis for deeper conceptualization.

Subsequently, axial coding was performed to organize the open codes into broader categories and to identify relationships among them. During this stage, one central category was identified as the core phenomenon, and all other categories were positioned in relation to it as contextual conditions, causal conditions, strategies, mediating conditions, or consequences. Throughout this process, iterative comparison of data segments ensured consistency and theoretical saturation. The thematic map that emerged from qualitative analysis served as the foundation for designing the conceptual model of organizational learning based on multiple intelligences.

In the meta-synthesis portion, extracted concepts from literature were systematically compared and integrated with interview-derived findings. This triangulation strengthened the methodological rigor and enriched the conceptual framework by combining theoretical and empirical insights.

Quantitative analysis was conducted using structural equation modeling to test the relationships among variables and assess the fit of the proposed predictive model. After the questionnaire data were entered and cleaned, multiple statistical steps were carried out, including reliability testing, confirmatory factor analysis, and evaluation of structural paths. Through these analyses, the predictive power of multiple intelligences for organizational learning, as well as the mediating or moderating roles of specific dimensions, was empirically assessed. The final validated model provided evidence for how components of multiple intelligences contribute to strengthening organizational learning in Iranian schools.

Findings and Results

The qualitative phase of the research yielded a comprehensive thematic framework explaining how organizational learning develops when integrated with the principles of multiple intelligences in Iranian schools. Through systematic analysis—including meta-synthesis of existing literature and thematic analysis of interview data—sixteen major organizing themes and their corresponding basic themes were extracted. These themes reflect cultural, psychological, structural, cognitive, technological, reflective, and intelligence-based dimensions of leadership and learning, collectively forming the foundation of the predictive model of organizational learning based on multiple intelligences.

Table 1. Organizing Themes and Basic Themes Related to the Predictive Model of Organizational Learning Based on Multiple Intelligences

Organizing Themes	Basic Themes
Collaborative Learning Culture	Professional interaction among teachers; Co-learning in group sessions; Support for teacher innovation; Respect for diverse viewpoints; Encouragement of open dialogue
Safe and Open Psychological Climate	Error tolerance in the school; Mutual trust within the educational team; Psychological and job security for teachers; Freedom to express ideas; Acceptance of individual differences
Organizational Learning Structures	Decentralized and flexible structure; Collective decision-making space; Support for experiential learning; Transparency in processes; Designing growth opportunities
Use of Technology and Educational Innovation	Use of digital platforms; Blended learning and flipped learning; Creativity in instructional design; Participation in professional virtual networks; Learning from technological resources
Experiential and Reflective Learning	Learning from past mistakes; Documenting instructional experiences; Reviewing previous actions; Reflective dialogue with colleagues; Analysis of real situations
Continuous and Lifelong Learning	Professional development programs; Pursuit of new trainings; Intrinsic motivation for advancement; Commitment to self-development; Connection to scientific resources
Use of Feedback and Data	Analysis of performance results; Multi-dimensional feedback collection; Continuous evaluation of teaching; Alignment of performance with goals; Use of data for decision-making
Organizational Memory and Collective Knowledge	Archiving successful and unsuccessful experiences; Knowledge transfer across generations; Internal school knowledge bank; Sharing experiences in meetings; Structuring experiential knowledge
Verbal–Linguistic Intelligence in Educational Leadership	Verbal persuasion; Inspirational storytelling; Conveying complex concepts; Use of metaphor in instruction; Effective public speaking

Logical–Mathematical Intelligence in Educational Leadership	Systematic problem-solving; Data-based decision-making; Analysis of results; Logical program development; Identification of logical patterns
Visual–Spatial Intelligence in Educational Leadership	Use of diagrams; Attention to visual environment; Imagery-based thinking; Use of visual elements; Use of digital visual tools
Bodily–Kinesthetic Intelligence in Educational Leadership	Support for hands-on learning; Participation in practical events; Promotion of practical activities; Attention to health and movement; Creating an active and dynamic environment
Musical Intelligence in Educational Leadership	Use of music; Support for artistic activities; Sense of rhythm; Creating enthusiasm and vitality; Influence of music on learning
Interpersonal Intelligence in Relationship Management	Effective interaction with teachers; Awareness of behavioral differences; Creating a supportive atmosphere; Motivating staff through human relations; Active face-to-face communication
Intrapersonal Intelligence in Educational Leadership	Recognizing strengths and weaknesses; Setting personal learning goals; Self-reflection on performance; Commitment to personal learning; Skill in time management
Naturalistic Intelligence in Educational Leadership	Nature exploration; Respect for natural resources; Environmental sustainability; Promotion of biodiversity; Encouragement of nature-based research

The table illustrates that organizational learning in schools is supported by a multilayered structure of cultural collaboration, psychological safety, flexible organizational systems, and technological engagement. Reflective and experiential learning mechanisms, combined with continuous professional growth and data-driven decision-making, further strengthen learning capacity. Additionally, the integration of Gardner's multiple intelligences into leadership practice—linguistic, logical–mathematical, visual–spatial, bodily–kinesthetic, musical, interpersonal, intrapersonal, and naturalistic—highlights how diverse cognitive abilities contribute to effective communication, problem-solving, creativity, relationship building, and environmental awareness. Together, these sixteen organizing themes and their associated basic themes provide a robust and interconnected framework that explains how schools can enhance organizational learning through intelligence-based leadership and a supportive learning culture.

Table 2. Global Themes, Organizing Themes, and Basic Themes Related to the Predictive Model of Organizational Learning Based on Multiple Intelligences

Global Themes	Organizing Themes	Basic Themes
Empowering Learning Environment in Schools	Collaborative Learning Culture	Professional interaction among teachers; Co-learning in group sessions; Support for teacher innovation; Respect for diverse viewpoints; Encouragement of open dialogue
	Safe and Open Psychological Climate	Error tolerance in the school; Mutual trust within the educational team; Psychological and job security for teachers; Freedom to express ideas; Acceptance of individual differences
	Organizational Learning Structures	Decentralized and flexible structure; Collective decision-making space; Support for experiential learning; Transparency in processes; Designing growth opportunities
	Use of Technology and Educational Innovation	Use of digital platforms; Blended learning and flipped learning; Creativity in instructional design; Participation in professional virtual networks; Learning from technological resources
Capacity Building for Sustainable Organizational Learning	Experiential and Reflective Learning	Learning from past mistakes; Documenting instructional experiences; Reviewing previous actions; Reflective dialogue with colleagues; Analysis of real situations
	Continuous and Lifelong Learning	Professional development programs; Pursuit of new trainings; Intrinsic motivation for advancement; Commitment to self-development; Connection to scientific resources
	Use of Feedback and Data	Analysis of performance results; Multi-dimensional feedback collection; Continuous evaluation of teaching; Alignment of performance with goals; Use of data for decision-making
	Organizational Memory and Collective Knowledge	Archiving successful and unsuccessful experiences; Knowledge transfer across generations; Internal school knowledge bank; Sharing experiences in meetings; Structuring experiential knowledge
Educational Leadership Based on Multiple Intelligences	Verbal–Linguistic Intelligence in Leadership	Verbal persuasion; Inspirational storytelling; Conveying complex concepts; Use of metaphor in instruction; Effective public speaking
	Logical–Mathematical Intelligence in Leadership	Systematic problem-solving; Data-based decision-making; Analysis of results; Logical program development; Identification of logical patterns
	Visual–Spatial Intelligence in Leadership	Use of diagrams; Attention to visual environment; Imagery-based thinking; Use of visual elements; Use of digital visual tools

	Bodily–Kinesthetic Intelligence in Leadership	Support for hands-on learning; Participation in practical events; Promotion of practical activities; Attention to health and movement; Creating an active and dynamic environment
	Musical Intelligence in Leadership	Use of music; Support for artistic activities; Sense of rhythm; Creating enthusiasm and vitality; Influence of music on learning
	Interpersonal Intelligence in Relationship Management	Effective interaction with teachers; Awareness of behavioral differences; Creating a supportive atmosphere; Motivating staff through human relations; Active face-to-face communication
	Intrapersonal Intelligence in Leadership	Recognizing strengths and weaknesses; Setting personal learning goals; Self-reflection on performance; Commitment to personal learning; Skill in time management
	Naturalistic Intelligence in Leadership	Nature exploration; Respect for natural resources; Environmental sustainability; Promotion of biodiversity; Encouragement of nature-based research

The findings presented in Table 2 show that the first global theme—an empowering learning environment in schools—is constructed through organizational, cultural, and psychological foundations that enable meaningful engagement among teachers. Collaborative learning culture, psychological safety, and flexible organizational structures emerge as essential pillars for enabling teachers to exchange ideas, experiment with new methods, and engage in reflective dialogue without fear of judgment. Technology-enhanced instructional innovation further strengthens this environment, allowing teachers to use digital platforms and blended learning strategies to expand both their teaching capabilities and students' learning experiences. Collectively, these organizing themes suggest that organizational learning flourishes when schools prioritize open communication, shared decision-making, emotional security, and access to modern educational tools.

The second global theme—capacity building for sustainable organizational learning—reflects processes that ensure learning is ongoing, iterative, and continuously reinforced. Experiential and reflective learning mechanisms allow teachers to analyze their own practices, learn from mistakes, and document valuable experiences. Lifelong learning behaviors, including professional development and self-driven motivation, sustain the capacity for growth at both the individual and organizational levels. The explicit use of feedback and data ensures that instructional decisions become increasingly evidence-based, fostering alignment between performance and educational goals. Finally, organizational memory and collective knowledge serve as repositories that help schools retain valuable lessons across generations and preserve successful practices over time. These mechanisms together ensure the long-term sustainability and adaptability of organizational learning.

The third global theme—educational leadership based on multiple intelligences—demonstrates that leadership in schools is multi-dimensional and enriched by diverse cognitive strengths. Leaders with strong verbal–linguistic intelligence communicate effectively, articulate vision, and inspire teams through stories and metaphors. Logical–mathematical intelligence enables data-driven decisions, problem-solving, and analytical planning. Visual–spatial intelligence contributes to the design of visually engaging learning environments and the use of digital visualization tools. Bodily–kinesthetic and musical intelligences enhance experiential learning and create a dynamic, energetic atmosphere. Interpersonal and intrapersonal intelligences support relationship management, self-awareness, motivation, and reflective leadership. Naturalistic intelligence connects leaders and students to environmental values and sustainability practices. These diverse intelligences collectively shape a holistic, inclusive, and adaptive leadership model that strengthens the predictive framework for organizational learning in schools.

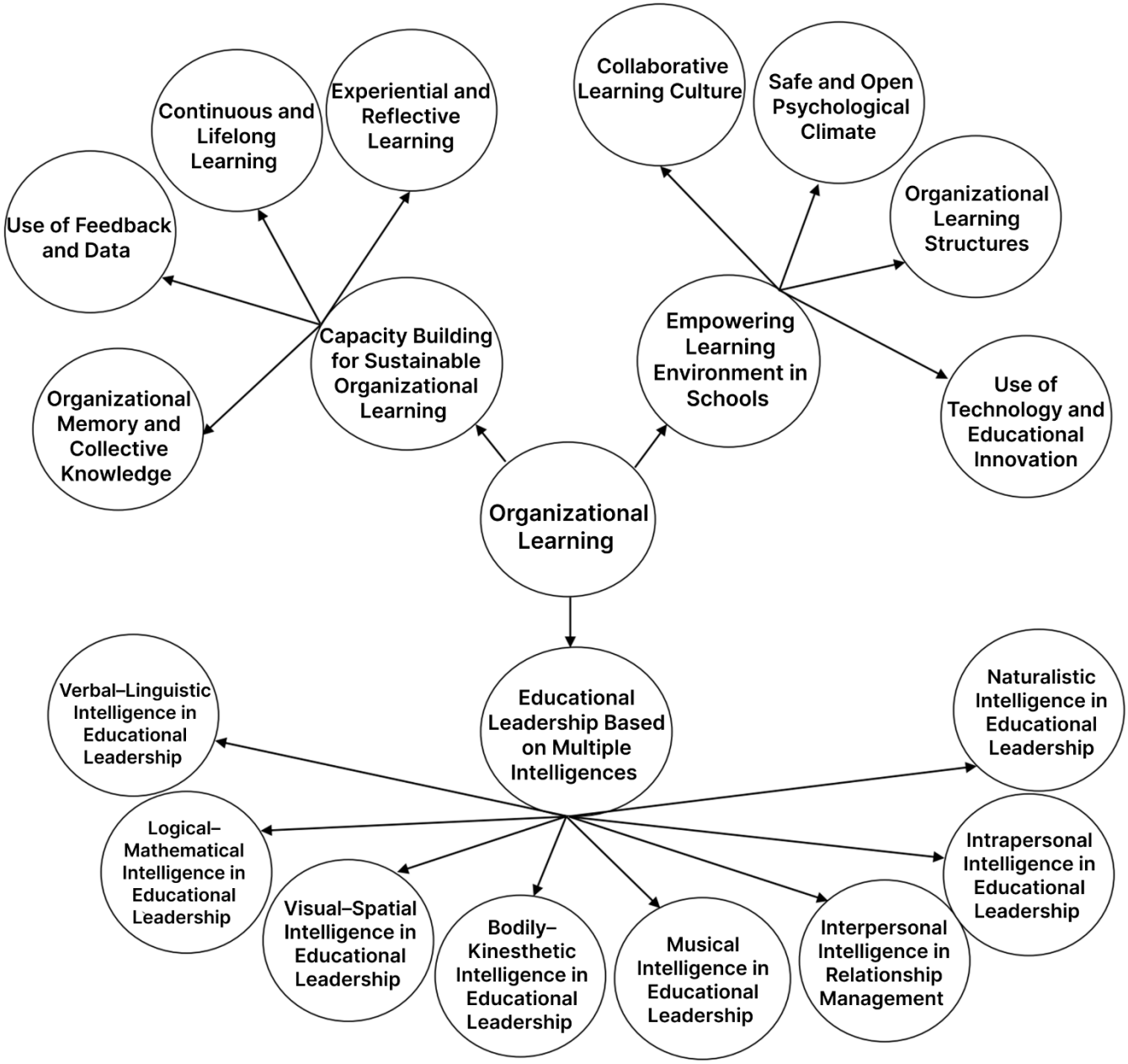

Figure 1. Final Paradigm Model of the Study

Discussion and Conclusion

The purpose of this study was to identify the dimensions, components, and indicators of an organizational learning model based on multiple intelligences within Iranian schools. The findings revealed a multilayered structure composed of three global themes—an empowering learning environment, capacity building for sustainable organizational learning, and educational leadership based on multiple intelligences. Together, these themes illustrate how organizational learning can be strengthened when schools integrate cognitive diversity, reflective practice, technological tools, psychological safety, and intelligence-based leadership. The results align strongly with and extend prior research on multiple intelligences and their educational implications.

The first major finding concerns the importance of an empowering learning environment that supports collaboration, psychological safety, adaptive organizational structures, and technological innovation. This corresponds with international

evidence demonstrating that learning environments grounded in social interaction and shared meaning-making strengthen student and teacher growth. Studies such as (2) emphasize that teachers' ability to differentiate instruction in mixed-ability classrooms depends heavily on supportive school structures and collaborative networks, consistent with our finding on collaborative learning culture. Similarly, research on interest centers shows that learning environments designed around multiple intelligences enhance student autonomy and engagement through diverse learning pathways (11). This is mirrored in our results showing that respecting diverse viewpoints, encouraging open dialogue, and fostering collective decision-making promote organizational learning.

Additionally, the significance of a safe and open psychological climate is supported by several prior studies. For instance, (13) highlights that differential instructional approaches improve psychological development among students, underscoring the need for emotional security and trust—factors also identified in our thematic structure. Likewise, research on multimodal learning analytics confirms that flexible and inclusive environments allow learners to employ their preferred modalities, reinforcing psychological safety and learner agency (14). The emphasis on psychological safety in our model resonates with these findings, suggesting that teachers and students learn more effectively within environments that value individuality and emotional well-being.

The second global theme involves capacity building for sustainable organizational learning, encompassing experiential and reflective learning, lifelong learning, feedback systems, and organizational memory. Our findings reveal that teachers' ability to learn from past experiences, document their pedagogical practices, and engage in reflective dialogue contributes to long-term organizational learning. This is consistent with (20), who found that integrated learning approaches combining multiple intelligences and learning styles promote teacher autonomy, adaptability, and continual improvement. Similarly, (17) demonstrated that MI-based instructional approaches improve teacher effectiveness in Indonesian madrasah settings, highlighting the importance of ongoing professional development—parallel to our theme of continuous and lifelong learning.

The role of feedback and data in strengthening organizational learning also aligns with prior empirical evidence. Studies from Kenya indicate that teacher assessment procedures significantly affect student outcomes (10), supporting our finding that systematic data use and performance analysis enhance learning at the organizational level. Likewise, (7) emphasized that diagnosing learning styles helps optimize instructional processes, implying that feedback mechanisms contribute to organizational improvement. The identification of organizational memory as a core component also parallels findings from studies emphasizing the importance of documenting experiences, archiving effective practices, and supporting knowledge transfer across generations (4).

The third global theme—educational leadership based on multiple intelligences—constitutes a major contribution of this study. Our findings indicate that verbal–linguistic, logical–mathematical, visual–spatial, bodily–kinesthetic, musical, interpersonal, intrapersonal, and naturalistic intelligences all play significant roles in shaping effective leadership. This aligns with global research demonstrating that leadership grounded in diverse intelligences supports communication, motivation, problem-solving, and innovation. For example, verbal and interpersonal intelligences contribute to inspirational communication and relationship-building—dimensions emphasized in (12) during English teaching assistance programs. Logical–mathematical intelligence supports data-driven decision-making, consistent with studies linking educational leadership to systematic thinking and program analysis (5). Visual–spatial intelligence aligns with findings that diagrams, visual models, and digital visualization tools enhance comprehension and instructional clarity (9).

Furthermore, bodily–kinesthetic and musical intelligences align with evidence that practical activities and music integration foster deep learning, creativity, and emotional regulation. For instance, (6) found that integrating music education enhances integrity and self-control, resonating with our findings that musical intelligence contributes to enthusiasm and positive school

climate. Intrapersonal intelligence, identified in our study as crucial for reflective leadership, parallels findings that self-awareness and personal learning goals improve teacher performance and leadership effectiveness (16). Naturalistic intelligence, which our model associates with environmental awareness and nature-based inquiry, also finds support in studies emphasizing sustainability and experiential outdoor learning (19).

The integration of all eight intelligences in leadership practices offers a comprehensive perspective that enhances the understanding of how leaders can cultivate a learning organization. This echoes findings from research on early childhood education, where MI-based learning models promote holistic development (3), and from studies in EFL contexts showing that integrating MI principles can improve cultural engagement, communication, and classroom motivation (15). Taken together, previous studies affirm that leadership informed by diverse intelligences supports complex, multidimensional school activities—from communication to decision-making, innovation, and emotional climate management.

Overall, the convergence of our findings with global literature demonstrates that multiple intelligences provide a powerful conceptual foundation for enhancing organizational learning. The themes identified in this study reflect not only individual cognitive strengths but also collective capacities that contribute to a robust learning environment. This positions multiple intelligences not merely as a pedagogical tool but as a framework for institutional development, professional growth, and sustainable organizational learning. The alignment between our findings and previous research strengthens the validity of the proposed model and underscores the need for Iranian schools to adopt intelligence-informed, collaborative, reflective, and data-driven approaches to organizational learning.

This study was conducted within a specific cultural and institutional context, which may limit the generalizability of the findings to other educational systems with different structures or sociocultural norms. The qualitative phase relied on expert interviews and literature synthesis, meaning that the identified components reflect available perspectives, which might not encompass all possible dimensions of organizational learning. Additionally, the quantitative validation relied on self-reported data, which may be influenced by social desirability or respondent bias. The complexity of the multiple intelligences framework may also pose challenges in isolating causal relationships among components.

Future studies could expand the sample to include a broader range of educational stakeholders, such as students, parents, and policymakers, to obtain a more comprehensive understanding of the organizational learning process. Longitudinal studies may help investigate how intelligence-based leadership and learning environments evolve over time and influence long-term school performance. Comparative studies across different countries or school types could also analyze whether cultural variables shape the intersection of organizational learning and multiple intelligences. Finally, future research may develop and test digital tools or analytics systems specifically designed to measure intelligence-based organizational learning indicators.

Educational leaders should intentionally cultivate learning environments that support collaboration, psychological safety, and shared decision-making. Teachers can benefit from professional development programs that help them integrate multiple intelligences into instructional planning and classroom management. Schools should strengthen feedback systems, document successful practices, and promote knowledge sharing to support sustainable organizational learning. Leadership training programs should incorporate multiple intelligence profiles to help administrators develop diverse competencies in communication, analysis, creativity, and interpersonal relations. Ultimately, schools that nurture cognitive diversity and reflective practice will be better positioned to navigate emerging educational challenges.

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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 adhered 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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