

# Architecture of Learning Ecosystem Based on Islamic Education Management

Setyo Pamungkas<sup>1</sup>, Nurfuadi<sup>2</sup>

<sup>1,2</sup>Universitas Islam Negeri Prof. KH. Saifuddin Zuhri, Purwokerto, Indonesia

\* Correspondence e-mail; 244120500061@mhs.uinsaizu.ac.id

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## Abstract

Contemporary educational studies show that the quality of interactions, emotional climate, and learning space design significantly influence student academic achievement. This article aims to contextually reconstruct the architecture of the learning ecosystem in creating a conducive classroom environment based on Islamic educational management. This study uses a literature study approach by analyzing the theory of learning ecosystems, classroom management, and Islamic educational principles. Concept synthesis is carried out through the categorization and integration of key themes from various scientific sources. The results of the study indicate that a conducive classroom environment from an Islamic educational perspective is built through five integrative dimensions: internalization of moral values, adaptive physical classroom design, proportional technology integration, contextual project-based learning, and systemic collaboration between schools, families, and communities. This article offers a conceptual model that places spiritual values at the core of integrating all components of the learning ecosystem.

## Keywords

Classroom Management Islamic Education; Learning Ecosystem; Learning Environment; Moral Values.



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## INTRODUCTION

The classroom environment is a crucial determinant of learning effectiveness. Contemporary educational studies show that the quality of interactions, emotional climate, and learning space design significantly influence student academic achievement (Hattie, 2018). The classroom is understood not simply as a physical space, but as an ecosystem consisting of interactions between teachers, students, the curriculum, school culture, and social support. In the context of Islamic education, the classroom environment also functions as a space for internalizing values and fostering morality. Al-Ghazali's thought emphasizes that education aims to shape character and purify the soul, not merely the transfer of knowledge. Therefore, classroom management in Islamic education must integrate pedagogical and spiritual dimensions.

National educational management literature, as proposed by Mulyasa (2017), positions classroom management as part of a school management system oriented toward effective

learning. Meanwhile, teacher professionalism in classroom management is a key factor in the successful implementation of educational values (Nurfuadi, 2020). However, these studies generally have not systematically integrated the spiritual dimension within the framework of the learning ecosystem.

Based on the foregoing discussion, a significant research gap can be identified. Existing studies have extensively explored classroom management, learning environments, teacher professionalism, educational technology, and student engagement; however, there remains a lack of conceptual reconstruction that systematically integrates these dimensions within the framework of Islamic educational management. Previous research has not adequately explained how spiritual values can function as the central organizing principle connecting pedagogical relationships, classroom design, technology integration, contextual learning strategies, and school-family-community collaboration. In other words, the literature lacks a comprehensive architectural model of the learning ecosystem that positions Islamic values not merely as supplementary moral content but as the foundational structure governing all educational interactions and processes. This conceptual deficiency limits the development of holistic educational strategies capable of responding to contemporary educational challenges while preserving the distinctive objectives of Islamic education.

The rapid transformation of educational practices, accelerated by digitalization and changing social conditions, requires a renewed conceptual framework capable of harmonizing innovation with ethical and spiritual development. Accordingly, this article aims to reconstruct the architecture of a learning ecosystem based on Islamic educational management by identifying and integrating the essential dimensions that contribute to a conducive classroom environment. The study is expected to contribute theoretically by enriching the discourse on learning ecosystem theory from an Islamic educational perspective and practically by providing a conceptual reference for educators, school leaders, and policymakers in designing holistic educational environments that support both academic excellence and character formation. This article attempts to reconstruct the architecture of the learning ecosystem based on Islamic education management by placing spiritual values as the integrative core of all class components. This article aims to contextually reconstruct the architecture of the learning ecosystem in creating a conducive classroom environment based on Islamic educational management.

## **METHODS**

This study employed a qualitative conceptual research design based on library research to reconstruct the architecture of a learning ecosystem grounded in Islamic educational management. The selection of a conceptual approach was based on the nature of the research problem, which seeks to develop an integrative theoretical framework rather than to measure empirical relationships among variables. Conceptual studies are particularly appropriate when existing knowledge remains fragmented and requires systematic synthesis to generate new theoretical perspectives (Snyder, 2019). The object of analysis in this study consisted of scholarly

concepts related to learning ecosystems, classroom management, educational leadership, learning environment design, educational technology integration, and Islamic educational management. Sources of data included peer-reviewed journal articles, academic books, conference proceedings, and policy documents published primarily between 2020 and 2025, supplemented by seminal works that provide foundational perspectives on Islamic educational philosophy and management. By focusing on authoritative scholarly literature, this study aimed to identify the conceptual dimensions necessary for constructing a holistic learning ecosystem model that reflects both contemporary educational demands and Islamic educational values.

Data were collected through a systematic literature review process involving identification, selection, evaluation, and categorization of relevant academic sources. The primary instrument of the study was a literature analysis matrix designed to organize concepts, theoretical propositions, empirical findings, and key themes emerging from the selected literature. This instrument enabled the researchers to compare and integrate diverse perspectives across educational management, learning ecosystem theory, and Islamic education studies. Data analysis was conducted using thematic content analysis, which involved three interconnected stages: open coding to identify recurring concepts, axial coding to establish relationships among themes, and selective coding to synthesize an overarching conceptual architecture (Creswell & Poth, 2018). Through this analytical process, five major dimensions of the learning ecosystem were identified and conceptually integrated, namely pedagogical relationships, physical classroom design, technology integration, contextual project-based learning, and school–family–community collaboration. Thematic content analysis was considered the most appropriate analytical technique because it facilitates the interpretation of complex theoretical constructs and enables the development of a coherent conceptual model from diverse bodies of literature.

The methodological choice is scientifically justified by the objective of the study, which is to formulate a theoretical reconstruction rather than to test causal relationships empirically. Since the research seeks to answer how Islamic educational management can serve as an integrative foundation for the learning ecosystem, a conceptual synthesis approach provides greater explanatory power than quantitative or purely descriptive methods. Furthermore, the integration of literature from educational management, learning ecosystem theory, and Islamic educational philosophy allows the development of a multidimensional framework capable of addressing contemporary educational challenges while preserving the spiritual and moral objectives of Islamic education. Consequently, the methodological design ensures consistency between the research objective, data sources, analytical procedures, and the expected theoretical contribution of the study.

## **FINDINGS AND DISCUSSION**

### **Dimensions of the Learning Ecosystem**

#### **Teacher-Student Interaction and Pedagogical Relationships**

The teacher-student relationship is central to creating a conducive classroom climate.

The quality of the pedagogical relationship determines how students feel about psychological safety, self-esteem, and engagement in the learning process. Rahman (2021) explains that positive teacher-student relationships significantly contribute to increased intrinsic motivation, active participation, and academic persistence. When students feel valued, heard, and treated fairly, they tend to demonstrate a higher commitment to learning. Thus, pedagogical relationships are not merely functional interactions in delivering material, but rather the emotional and social foundation that underpins academic success.

From an Islamic educational perspective, the teacher-student relationship has deeper dimensions, namely moral and spiritual dimensions. This relationship is built on the foundation of exemplary behavior (*uswah hasanah*), justice (*'adl*), and empathy (*rahmah*), as taught by Al-Ghazali. Teachers are positioned not only as transmitters of knowledge (*mu'allim*), but also as character builders (*murabbi*) and spiritual guides (*mursyid*). Therefore, interactions within the classroom must reflect the values of politeness, respect, and moral responsibility, so that the learning process takes place in a humanistic and dignified atmosphere.

Teacher professionalism, as emphasized by Nurfuadi (2020), is not limited to mastery of pedagogical and methodological competencies, but also encompasses moral integrity and consistent behavior. Professional teachers are those who are able to harmonize knowledge, teaching skills, and exemplary attitudes. In the context of Islamic education classroom management, this professionalism is a key factor in establishing a healthy learning culture. Thus, pedagogical interactions in Islamic classrooms are both educational and transformative, as they not only transmit knowledge but also continuously shape the character and moral awareness of students.

### **Physical Classroom Design as a Supporting Factor**

The physical environment significantly influences students' psychological comfort and learning concentration. The classroom is not simply a place for learning activities, but also a contextual factor that shapes the overall learning experience. Cohen et al. (2019) emphasized that aspects such as adequate natural lighting, good air circulation, flexible seating arrangements, and sufficient space for movement have been shown to increase student motivation, engagement, and participation in the learning process. A spatial design that allows for face-to-face interaction and dynamic mobility also contributes to a more active and collaborative learning environment.

Within the framework of educational management, classroom design is inseparable from the strategic planning function of learning. Mulyasa (2017) emphasized that managing the learning environment is an integral part of school management, aimed at creating an effective and efficient educational process. This means that classroom layout must be consciously and systematically designed according to learning objectives, student characteristics, and the pedagogical approach used. Teachers and school administrators need to view spatial design as a pedagogical investment, not simply an administrative arrangement.

From an Islamic educational perspective, classroom design that supports collaboration

not only functions pedagogically but also has a value dimension. A spatial layout that allows for group discussion, cooperation, and equal interaction reflects the principles of deliberation (shura) and togetherness (ukhuwah). Thus, the physical arrangement of the classroom can be a means of internalizing social and spiritual values, because spaces designed for collaboration indirectly form a culture of dialogue, mutual respect, and shared responsibility in the learning process.

### **Technology Integration from a Values Perspective**

Developments in educational technology have opened up greater opportunities for innovation in learning practices. Digitization, the use of multimedia devices, and online learning platforms have transformed the way teachers deliver material and students access knowledge. Technology enables more interactive, visual, and contextual presentation of information, thereby increasing attention spans and increasing the variety of learning methods. However, technological innovation does not automatically guarantee quality learning, as its effectiveness depends heavily on how it is integrated into pedagogical design.

Zainuddin (2019) emphasizes that technology integration in Islamic education must be carried out wisely and selectively to maintain alignment with moral values and the goal of character building. Technology is viewed as an instrument (wasilah), not the primary goal of learning. Therefore, its use must consider ethical dimensions, such as content that aligns with Islamic values, controlling its use to avoid distraction, and strengthening responsible digital literacy. Within the framework of classroom management, teachers act as guides, ensuring that technology supports educational interactions, not replaces them.

The principle of balance (wasathiyah) serves as the normative basis for the proportional use of technology. This balance is reflected in efforts to maintain harmony between digital innovation and humanistic interactions in the classroom. Technology should strengthen communication, enrich learning resources, and facilitate collaboration, without eliminating the personal touch between teachers and students. Therefore, from an Islamic educational perspective, technology integration is viewed not only in terms of efficiency and modernity, but also in terms of its ability to support the transformative goal of education, namely the formation of knowledgeable and moral individuals.

### **Project-Based Learning and the Contextualization of Values**

Project-based learning enables students to connect theoretical concepts with the social realities they encounter in their daily lives. Through active involvement in solving real-life problems, students not only cognitively understand the material but also develop critical, collaborative, and reflective thinking skills. This model encourages a constructive learning process, where knowledge is built through direct experience and social interaction, rather than simply passively receiving information.

Sari (2020) suggests that the project-based approach in the context of Islamic education is effective because it fosters the internalization of values through concrete practice. When students engage in social projects, such as community service activities, environmental management, or ethics-based entrepreneurship programs, they learn to directly apply the

principles of justice, responsibility, and care. Thus, Islamic values are not merely understood as normative concepts but are internalized through meaningful, concrete actions.

This approach also reinforces the dimensions of social responsibility and concern for society, which are essential goals of Islamic education. Education does not stop at mastering knowledge, but is directed toward developing individuals with collective awareness and social contribution. Within the framework of values-based classroom management, project-based learning becomes a relevant strategy for fostering participatory and empathetic character. Through collaborative experiences and reflection on the social impact of each activity, students are encouraged to understand that knowledge has moral consequences and societal responsibilities.

### **School-Family-Community Collaboration**

The learning ecosystem is not limited to the physical classroom, but encompasses a broader network of social relationships, including family and community. The educational process takes place within the interplay of the school, home, and the student's social environment.

Hattie (2018) emphasizes that social support, particularly parental involvement in the educational process, significantly contributes to improving student learning outcomes and developing student motivation. This support can take the form of home learning supervision, intense communication with teachers, and creating a family environment conducive to academic activity.

Within the framework of Islamic educational management, collaboration between schools, parents, and the community is not merely an administrative complement, but an integral strategy for building a values-based school culture. Mulyasa (2017) explains that strengthening school culture requires synergy between various stakeholders so that the educational vision and goals can be consistently realized. From an Islamic perspective, the responsibility for education is not solely the responsibility of formal institutions but is a collective mandate involving families and the community. Therefore, a harmonious partnership between schools and parents is fundamental to maintaining the continuity of the character-building process.

This collaboration creates consistency of values between home and school, preventing students from experiencing normative dissonance in their development. When the values taught in the classroom align with practices implemented in the family environment, internalization of values is more effective and sustainable. Thus, a learning ecosystem based on Islamic educational management positions social partnerships as an integral part of character-building strategies and improving the quality of learning.

The conceptual reconstruction developed in this study indicates that the architecture of a learning ecosystem based on Islamic educational management is formed through the integration of five interrelated dimensions: pedagogical relationships, adaptive physical learning environments, value-oriented technology integration, contextual project-based learning, and collaborative partnerships among schools, families, and communities. The

analysis suggests that these dimensions cannot function effectively as isolated educational components because their effectiveness depends on the presence of a unifying value system that directs educational interactions toward holistic human development. In this model, spiritual and moral values serve as the organizing core that connects all ecosystem elements. This finding aligns with recent studies emphasizing that educational quality is strongly influenced by the interaction between social, environmental, and organizational factors rather than by instructional practices alone (Khalifa & Alghamdi, 2023; Thornberg et al., 2022). However, unlike many contemporary learning ecosystem frameworks that focus primarily on student engagement, digital innovation, or school effectiveness, the present study argues that spiritual values function not merely as complementary elements but as the central mechanism that coordinates educational processes. This conceptual distinction is significant because it provides an alternative perspective to dominant secular ecosystem models, which often overlook the role of transcendental values in shaping educational behavior and institutional culture.

A particularly important finding concerns the role of pedagogical relationships as the primary gateway through which ecosystem values are transmitted and sustained. The synthesis of literature demonstrates that teacher-student interactions characterized by empathy, justice, respect, and moral exemplarity contribute not only to academic engagement but also to the formation of ethical awareness and social responsibility. This finding supports empirical evidence showing that positive teacher-student relationships significantly improve student motivation, participation, and academic persistence (Pérez-Salas et al., 2021; Xie & Derakhshan, 2021). Nevertheless, the present study extends previous findings by suggesting that within Islamic educational management, pedagogical relationships possess a transformative function beyond psychological support. Teachers act simultaneously as instructors, mentors, and moral exemplars whose behavior becomes an integral part of the learning process. This explains why the effectiveness of classroom management in Islamic education cannot be reduced to behavioral control or instructional competence alone. Theoretically, this interpretation is consistent with Al-Ghazali's conception of education, which views character formation as inseparable from knowledge acquisition. Consequently, the learning ecosystem becomes effective not merely because it creates favorable learning conditions but because it cultivates a moral environment in which educational interactions continuously reinforce ethical and spiritual development. This finding contributes to the growing body of literature calling for more humanistic and values-centered approaches to educational leadership and classroom management in the digital era (Alamri & Tyler-Wood, 2024).

Another significant finding is that technology integration, project-based learning, and school-family-community collaboration become educationally meaningful only when embedded within a coherent value framework. Previous studies generally report that technology-enhanced learning environments and project-based pedagogies improve student engagement, creativity, and problem-solving abilities (Bond et al., 2024; Guo et al., 2023).

While these findings are confirmed by the present conceptual analysis, this study argues that educational innovation alone does not automatically produce holistic learning outcomes. Without ethical guidance and social reinforcement, technological advancement may lead to fragmented learning experiences and weaken interpersonal relationships. Likewise, project-based learning achieves deeper educational impact when projects are connected to social responsibility, community service, and moral reflection. The inclusion of school-family-community collaboration further strengthens the ecosystem by creating consistency between values promoted in educational institutions and those practiced in students' daily lives. This finding differs from many conventional ecosystem models that position stakeholders primarily as support mechanisms for academic achievement. Instead, the present model conceptualizes stakeholders as co-constructors of moral culture within the learning ecosystem. The implication is that educational management should move beyond administrative coordination toward the cultivation of a shared value-based educational vision. Scientifically, this contributes to the development of an integrative theoretical framework capable of bridging educational management theory, learning ecosystem theory, and Islamic educational philosophy, thereby offering a more comprehensive understanding of how conducive learning environments can be constructed in contemporary educational contexts.

## **CONCLUSION**

The architecture of a learning ecosystem based on Islamic education management is a conceptual construct that places spiritual values at the core of integrating all classroom components. A conducive learning environment is determined not only by physical design and pedagogical strategies, but also by the quality of the values that bind the interactions within it. By integrating pedagogical relationships, spatial design, technology, learning strategies, and social collaboration within a single value framework, Islamic education classroom management has the potential to be a holistic and transformative approach. This conceptual model opens up space for further empirical research to test its validity and effectiveness in various educational contexts.

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