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Reconstructing The Role Of Teachers And Lecturers As Innovation Agents In The Transformation Of Islamic Religious Education (Pai) Learning

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Abstract

The transformation of learning in the digital and artificial intelligence (AI) era requires a shift in the roles of teachers and lecturers from learning implementers and users of innovation to actors capable of strategically directing change. In the context of Islamic Religious Education (PAI), this shift is not merely concerned with the utilization of technology but must also take into account pedagogical, epistemic, ethical, and spiritual dimensions. This article aims to reconstruct the roles of teachers and lecturers as Innovation Agents in the transformation of PAI learning. This study employs a critical literature review approach and conceptual analysis by mapping, critically evaluating, and synthesizing literature on teacher agency, change agency, educational innovation, Technological Pedagogical Content Knowledge (TPACK), digital competence, and the transformation of PAI learning in the AI era. The findings indicate that the role of an Innovation Agent can be reconstructed into seven interrelated dimensions: Change Reader, Innovation Initiator, Learning Designer, Digital and Epistemic Curator, Ethical-Spiritual Gatekeeper, Collaborative Change Maker, and Reflective Evaluator. These seven dimensions form a cycle of professional capacity that enables educators to interpret changes, initiate innovations, design learning experiences, manage technology and knowledge, uphold ethical and spiritual orientations, foster collaboration, and conduct evaluation and reflection. This reconstruction

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positions PAI teachers and lecturers as strategic actors who not only utilize innovation but also actively direct the continuous transformation of learning.

Keywords: Innovation Agent, teacher agency, learning transformation, Islamic Religious Education.

INTRODUCTION

The transformation of education in the digital and artificial intelligence (AI) era has changed not only learning tools and media but also the ways in which knowledge is produced, distributed, accessed, and negotiated within educational processes. Educators are confronted with learning environments that are increasingly open, interconnected, multimodal, and rapidly evolving, while learners have access to knowledge sources that are no longer entirely dependent on the classroom. Under these circumstances, learning transformation cannot adequately be understood as the process of adding technology to existing pedagogical practices. The more fundamental issue concerns how educators make pedagogical decisions, interpret change, respond to learners' needs, and guide the use of technology to generate meaningful changes in learning. Thus, educational transformation is essentially also a matter of changing the positions and capacities of educational actors, particularly teachers and lecturers as the primary practitioners of pedagogical practice (Biesta et al., 2015).

This issue becomes more complex in Islamic Religious Education (PAI). Unlike learning that is oriented solely toward the acquisition of information, PAI encompasses knowledge, attitude formation, value internalization, character development, and the cultivation of learners' religious orientations. Therefore, the transformation of PAI learning cannot be equated with the digitization of learning materials or the transfer of conventional learning activities to digital platforms. The use of learning management systems, social media, multimedia, and AI can only be regarded as pedagogical innovation when these technologies improve the quality of learning experiences while preserving the epistemic, pedagogical, ethical, and spiritual objectives of Islamic education. Recent studies on the transformation of PAI in the AI era indicate that digitalization initiatives also face challenges related to the authenticity of religious knowledge, learning quality, governance, and academic integrity (Faridah et al., 2026).

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In this context, the traditional conception of educators as content deliverers or curriculum implementers has become increasingly inadequate. Teachers and lecturers are required to perform more complex functions: interpreting changes in the educational environment, understanding learners' needs, selecting and developing learning strategies, integrating technology with pedagogical objectives, evaluating innovations, and making professional decisions when confronted with issues that cannot be entirely determined by curricula or policies. This shift does not mean that educators' fundamental functions have lost their relevance; rather, it indicates that these functions need to be expanded. Educators must not only be capable of implementing change but also possess the capacity to understand, design, initiate, direct, and evaluate change.

At this point, the concept of teacher agency becomes important. Biesta, Priestley, and Robinson view teacher agency not as an individual attribute that teachers permanently possess but as an achievement of action shaped by the interaction of professional experience, future orientations, practical judgments, and the cultural, structural, and material conditions in which teachers work (Biesta et al., 2015).

This ecological framework of agency provides an important foundation for reconstructing the position of educators in the transformation of PAI learning. Priestley, Biesta, and Robinson emphasize that teacher agency emerges through the dynamic relationship between individual capacities and the structural, cultural, and material resources available within their professional environments (Priestley et al., 2015). From this perspective, educators are not positioned as passive implementers of innovations designed by policymakers, institutions, or technology providers. Instead, they are actors who interpret change and determine how it is translated into practice. In the context of PAI, this position is particularly important because pedagogical decisions concern not only learning effectiveness but also the selection of knowledge, the ways values are conveyed, the formation of religious attitudes, and the ethical boundaries of technology use.

Recent literature reviews have also begun to develop a more explicit conception of PAI teachers as innovators. Ulum and Noviana, for example, propose the concept of Value-Added TPACK to explain the role of PAI teachers as digital learning innovators and guardians of values (ethical gatekeepers) (Ulum & Noviana, 2026). This concept is important because it demonstrates that technology integration in PAI must be aligned with Islamic values rather than being driven solely by learning efficiency. However, this framework primarily addresses issues of competence

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and teachers' roles in digital learning. The broader question of how teachers and lecturers can jointly be positioned as strategic actors who initiate and direct innovation has not yet received an adequate conceptual formulation.

This issue becomes even clearer when considering the research conducted by Supriadi, Muhammad, and Ahyar on PAI teachers as innovation agents at MAN 2 Mataram. Their study explicitly uses the term "innovation agent" and finds that teachers perform the functions of initiators, designers, implementers, evaluators, and disseminators of technology-based learning innovations. The study also employs the TPACK framework to explain the integration of technology, pedagogy, and religious content (Supriadi et al., 2025). These findings provide an important foundation for the present article while also establishing a boundary that prevents it from repeating the claim that PAI teachers as innovation agents constitute an unexplored research area. The study has empirically demonstrated that PAI teachers can perform innovation-agent functions in the context of Islamic senior secondary education (madrasah aliyah). Nevertheless, it is a case study situated within a specific institutional context and primarily focuses on technology-based innovation practices. The conceptual space that remains open concerns how this concept can be developed beyond a mere description of teachers' roles into a theoretical construct for reconstructing educators' roles, and how this construct can encompass both teachers and lecturers within a single PAI educational ecosystem.

The need to expand this construct becomes increasingly relevant because the transformation of PAI learning takes place across multiple educational levels. Teachers operate within the pedagogical environments of schools and madrasahs, whereas lecturers work in higher education settings characterized by different epistemic, pedagogical, and institutional conditions. Nevertheless, both share a common position as educators responsible for the formation of knowledge and values through PAI learning. Furthermore, the original development of the TPACK framework emerged from research that was concerned not only with schoolteachers but also with professional development and faculty development in higher education (Mishra & Koehler, 2006). This opens up the possibility of viewing teachers and lecturers not as two entirely separate groups but as actors operating at different levels within the same educational ecosystem.

In light of these contextual differences, the subject of this article is explicitly defined as PAI teachers and lecturers working at the school/madrasah and higher education levels. The concept of teacher agency is used as one of the conceptual foundations for explaining educators' capacity to take professional action, but it is not intended to restrict the scope of the study to

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schoolteachers alone. In higher education, lecturer agency is also essential for understanding change and professional development, taking into account professional identity, social relations, leadership, policies, and institutional conditions (Cong-Lem, 2026). Accordingly, Innovation Agent is conceptualized in this article as the strategic capacity of PAI teachers and lecturers, while differences in institutional contexts are understood as conditions that influence how this agency is manifested.

From this perspective, the central issue addressed by this article is no longer whether teachers and lecturers need to be innovative. The answer is already sufficiently clear. The more fundamental issue is how their roles should be reconstructed so that innovative capacity becomes an integral part of the professional identity and practice of PAI educators. Such reconstruction is necessary because the term "innovator" is often narrowly understood as the ability to develop methods or use new technologies. In reality, innovation agents in education perform broader functions: interpreting change, identifying needs, developing a vision for change, designing alternatives, orchestrating resources, adapting innovations to specific contexts, reflecting on their impacts, and ensuring that change does not lose sight of educational objectives. Accordingly, Innovation Agent in this article is not positioned as a new professional identity existing outside the roles of teachers or lecturers. Instead, it is understood as a strategic capacity embedded in the reconstruction of teachers' and lecturers' professional roles as educators.

This distinction is conceptually important. Educator refers to the actor; role refers to the functions and actions performed; whereas Innovation Agent refers to the strategic orientation and transformative capacity involved in carrying out those roles. Therefore, the conceptual relationship adopted in this article is not that "educators become innovation agents," but rather that educators undergo a reconstruction of their roles, enabling their capacity as Innovation Agents to become an integral part of their professional practice. Within this framework, teacher agency explains educators' capacities and processes of action within particular contexts, while Innovation Agent emphasizes the orientation of such actions toward creating and directing pedagogical change. The two concepts are closely related but not identical.

This construct also enables the transformation of PAI to be understood more substantively. Learning transformation should not be measured solely by the number of digital devices used, the frequency of learning platform utilization, or educators' ability to operate AI tools. Meaningful transformation occurs when innovation changes the quality of pedagogical relationships, the ways learners construct knowledge, patterns of learning interaction, problem-

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solving strategies, and the capacity of learning to respond to social and technological changes without losing its value-based orientation. Recent studies on the digital transformation of PAI in the AI era emphasize the importance of maintaining learning quality, the authenticity of religious knowledge, and academic integrity throughout the digitalization process (Faridah et al., 2026). Consequently, the success of PAI transformation depends heavily on educators' ability to connect innovation with educational objectives rather than merely adopt technology.

Based on developments in the literature, previous studies have established several important foundations, although conceptual fragmentation remains. Research on teacher agency explains educators' capacity to act within changing contexts; TPACK explains the complexity of the knowledge required to integrate technology, pedagogy, and content; studies of digital PAI explain changes in teachers' practices and competencies; and research on innovation agents demonstrates teachers' roles in initiating and implementing change. However, these four perspectives have not yet been fully integrated into a unified construct that explains the reconstruction of PAI teachers' and lecturers' roles as Innovation Agents, particularly by positioning pedagogical, digital, epistemic, and ethical-spiritual dimensions as an integrated orientation toward transformation.

In response to this gap, the article advances the conceptual position that the transformation of PAI learning should begin not with the question "What technology should be used?" but rather with the question "What roles should educators perform to ensure that innovation produces meaningful learning transformation?" This shift in questioning carries theoretical implications: teachers and lecturers are no longer positioned primarily as policy recipients or technology users but as pedagogical subjects capable of interpreting change, initiating innovation, designing learning, orchestrating resources, engaging in reflection, and safeguarding value orientations throughout the transformation process. Within this framework, Innovation Agent is not a peripheral additional function but a form of professional development for educators in response to an ever-changing educational environment.

Based on this argument, this article aims to reconstruct the roles of teachers and lecturers as Innovation Agents in the transformation of PAI learning through a critical review of the literature on teacher agency, pedagogical innovation, TPACK, the digital transformation of PAI, and developments in AI within Islamic education. Specifically, the article addresses three research questions: (1) How does the changing landscape of contemporary education necessitate the reconstruction of the roles of PAI teachers and lecturers? (2) How can the concept of Innovation

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Agent be constructed as a strategic capacity within the professional practice of PAI teachers and lecturers? and (3) How can this construct serve as the foundation for a conceptual model of PAI learning transformation that is innovative, adaptive, reflective, and firmly grounded in the values of Islamic education?

Thus, the contribution of this article does not lie in reiterating the idea that educators must be capable of innovation. Rather, its contribution lies in the conceptual reorientation from educators as users of innovation toward educators as directors of transformation. This reconstruction enables teachers and lecturers to be understood as actors who not only adopt change but also bear epistemic, pedagogical, and ethical responsibilities for determining its direction.

METHODS

This study employs a critical literature review approach combined with conceptual analysis. This approach was selected because the study aims not only to map previous research but also to evaluate various perspectives, identify conceptual gaps and fragmentation, and develop a synthesis that generates a reconstructed understanding of the roles of teachers and lecturers as *Innovation Agents* in the transformation of Islamic Religious Education (PAI) learning. Literature review as a research methodology enables researchers to integrate various findings and perspectives from previous studies to obtain a more comprehensive understanding of a particular field of inquiry, while a critical review positions evaluation and synthesis as essential components in developing conceptual frameworks (Snyder, 2019).

The research sources consist of scholarly journal articles, academic books, and scientific publications relevant to the focus of the study, particularly those addressing *teacher agency*, educational innovation, *innovation agents*, TPACK, educators' digital competence, learning transformation, artificial intelligence in education, and Islamic Religious Education. The literature was searched using keywords representing the study's main concepts, namely *teacher agency*, *educational innovation*, *innovation agent*, TPACK, *digital competence*, *educational transformation*, and *Islamic Religious Education*. The retrieved literature was subsequently selected based on its relevance to the research focus, the academic quality of the sources, the clarity of bibliographic information, and its contribution to the development of conceptual arguments. Accordingly, the literature was not collected solely on the basis of thematic similarities but was assessed in terms of its capacity to explain educators' agency, innovation

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processes, the integration of technology and pedagogy, and the characteristics of PAI learning transformation.

To maintain relevance and minimize bias in source selection, the literature was not selected solely on the basis of terminological relevance but was assessed by considering the research focus, academic quality, conceptual relevance, and contribution to the research questions. The selection process involved comparing findings across the literature rather than relying on a single source as the sole basis for developing conceptual conclusions. Each concept incorporated into the reconstruction was re-examined in relation to other perspectives to ensure that the synthesis was not based merely on agreement among authors. This approach is consistent with the characteristics of a critical literature review, which treats searching, evaluation, synthesis, and analysis as interrelated processes in developing a conceptual framework (Snyder, 2019; Grant & Booth, 2009).

In this study, the literature analysis was conducted in three stages: mapping, critical evaluation, and conceptual synthesis. The mapping stage was used to identify the principal concepts, perspectives, functions, and trends represented in the literature. At this stage, the literature was classified according to its conceptual focus, including educators' capacity to act (*teacher agency*), educational innovation, technology and pedagogy integration, digital competence, learning design, knowledge management, collaboration, reflection, and the ethical orientation and values of Islamic education. The critical evaluation stage involved comparing the assumptions, emphases, contributions, and limitations of these perspectives to identify their relationships, differences, and conceptually fragmented elements. The synthesis stage subsequently connected concepts with substantive relationships to develop a more integrated understanding. This process is consistent with the characteristics of literature reviews, which emphasize searching, appraisal, synthesis, and analysis as essential elements in producing well-grounded review findings (Grant & Booth, 2009).

The results of the mapping and critical evaluation were then used to identify educators' functions and capacities that recur throughout the literature and are relevant to learning transformation. These concepts were subsequently grouped according to functional similarities and the relationships among functions within the innovation process. The grouping process brought together perspectives on *teacher agency*, educational innovation, digital competence, learning design, knowledge curation, educational ethics, collaboration, and reflection. The relationships among these concepts were then analyzed to identify patterns that could explain

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how educators' capacities are translated into innovative actions in the context of educational change. This process was used to construct a conceptual network as the foundation for conceptual reconstruction, rather than to empirically test relationships among variables (Jabareen, 2009).

Based on this synthesis, the roles of teachers and lecturers as *Innovation Agents* were reconstructed into seven strategic dimensions: *Change Reader, Innovation Initiator, Learning Designer, Digital and Epistemic Curator, Ethical-Spiritual Gatekeeper, Collaborative Change Maker,* and *Reflective Evaluator*. These seven dimensions were formulated by integrating educators' functions identified in the literature and were not conceived as independent or isolated roles. *Change Reader* refers to educators' ability to interpret changes and identify the needs of the educational environment; *Innovation Initiator* denotes the ability to translate these interpretations into innovative ideas and actions; *Learning Designer* translates innovation into learning designs; *Digital and Epistemic Curator* concerns the ability to select and manage technologies and knowledge sources; *Ethical-Spiritual Gatekeeper* ensures that innovations align with pedagogical and epistemic considerations, ethical principles, and the values of Islamic education; *Collaborative Change Maker* advances innovation through collaboration; while *Reflective Evaluator* evaluates and reflects on innovation processes and outcomes. Thus, these seven dimensions represent the results of conceptual reconstruction based on literature synthesis rather than merely a categorization of terms drawn from previous studies.

The final stage of the study focused on developing a conceptual framework that explains the relationships among changes in the educational environment, *Innovation Agent* capacities, innovation processes, and PAI learning transformation. The synthesized concepts were organized into a framework illustrating the interconnections among the *Innovation Agent* dimensions within a professional cycle: interpreting change, initiating innovation, designing learning, curating technology and knowledge, ensuring ethical-spiritual alignment, fostering collaboration, and conducting evaluation and reflection. This framework serves as the basis for explaining how PAI teachers and lecturers can be positioned not merely as users of innovation but as actors who direct and critically reflect on the learning transformation process. Conceptual analysis enables concepts drawn from multidisciplinary literature to be connected and organized into a coherent conceptual network that provides the foundation for developing a conceptual framework (Jabareen, 2009).

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RESULTS AND DISCUSSION

The critical literature review and conceptual analysis yielded an integrative reconstruction of the roles of teachers and lecturers as Innovation Agents in the transformation of Islamic Religious Education (PAI) learning. The synthesis draws on four interrelated perspectives: teacher agency; change agency and educational innovation; Technological Pedagogical Content Knowledge (TPACK) and digital competence; and the transformation of PAI learning in the age of artificial intelligence (AI). Together, these perspectives help explain how educators can move beyond implementing existing innovations to strategically directing meaningful changes in learning.

Conceptual Foundations for Reconstructing the Innovation Agent Role

1. Teacher Agency and Educators' Capacity to Act

In this article, teacher agency is not used to restrict the discussion exclusively to schoolteachers. Rather, it provides a conceptual foundation for understanding educators' capacity to act professionally and respond to changing contexts. To account for higher education, the discussion is complemented by literature on lecturer agency, preventing the Innovation Agent construct from being biased toward school or madrasah settings (Cong-Lem, 2026). Teacher agency and lecturer agency are therefore understood as capacities that share underlying principles while remaining shaped by their respective institutional contexts.

From an ecological perspective, teacher agency refers to educators' capacity to make professional decisions and take action within particular educational settings. Agency does not arise from individual capacity alone; it is formed through interactions with social, cultural, structural, and material conditions. Educators' past experiences, future orientations, and practical judgments in specific situations also shape their actions (Priestley et al., 2015). This perspective suggests that professional competence alone is insufficient to generate change. Educators also need opportunities to interpret situations, determine possible courses of action, and exercise professional judgment. Their professional beliefs influence how they understand a situation and which actions they consider possible (Biesta et al., 2015).

Within the framework proposed here, teacher agency represents the capacity to act, whereas Innovation Agent describes the strategic direction of that capacity toward

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educational innovation. An Innovation Agent is therefore not simply an active teacher or lecturer, but an educator who deliberately mobilizes agency to generate, guide, and manage changes in learning.

2. Change Agency, Educational Innovation, and the Innovation Agent

The concept of change agency positions educators as actors who can contribute to educational change. Rather than merely receiving changes initiated by policies or institutions, educators can interpret emerging needs, develop ideas, influence practice, and help bring about change within educational settings (Pantić, 2026). Educational innovation, in turn, involves more than introducing something new. It encompasses initiation, decision-making, adoption, implementation, and evaluation, all of which are influenced by organizational and environmental conditions (Damanpour & Schneider, 2006). Innovation consequently requires actors who can translate ideas into practice.

On this basis, Innovation Agent is conceptualized as educators' strategic capacity to direct their agency toward learning innovation. Teachers and lecturers do not simply implement innovations that are already available; they can interpret change, initiate ideas, design alternatives, build collaboration, and evaluate outcomes. This concept is not presented as entirely new: previous research has already examined PAI teachers as innovation agents in technology-based learning (Supriadi et al., 2025). The contribution of this article lies instead in an integrative reconstruction that connects agency, innovation, technology, epistemology, Islamic ethics, collaboration, and reflection within a single conceptual framework.

3. TPACK, Digital Competence, and AI

Meaningful technology integration requires the coordination of technological, pedagogical, and content knowledge. The TPACK framework explains that effective educational technology use depends on educators' ability to integrate these three domains rather than treat technology as an isolated component (Mishra & Koehler, 2006). The development of AI further expands the competencies required of educators. Research on AI-TPACK points to the relationship between educators' ability to integrate AI into teaching and their digital competence (Hava & Babayiğit, 2025). Technology use should therefore be understood not merely as a technical skill but in relation to learning objectives, subject matter, pedagogy, learner characteristics, and the context of use. In the framework developed here, TPACK and digital competence provide the technological

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and pedagogical foundations of innovation. The Innovation Agent construct has a broader scope because it also encompasses the ability to direct technology and other innovation resources toward meaningful changes in learning.

4. **Transforming PAI Learning in the Age of AI**

AI creates both opportunities and challenges for PAI learning. It can support the development of learning resources, personalized learning, feedback, and instructional design. At the same time, its use raises concerns about information validity, the authority of religious knowledge, academic integrity, technological dependence, and ethics (Ibrohim et al., 2026). The transformation of PAI should therefore not be reduced to the digitization of learning.

Research on digital transformation in PAI highlights the importance of educator competence, instructional design, institutional strategies, collaboration, and the preservation of Islamic values in the use of technology (Wedi et al., 2025). A recent systematic review similarly indicates that digital- and AI-based transformation in PAI encompasses digital pedagogy, AI, educator readiness, institutional policy, and the ethics and governance of technology (Faridah et al., 2026). In this context, PAI teachers and lecturers need to guide change by selecting appropriate technologies, curating and verifying knowledge, considering ethical implications, and ensuring that innovation remains aligned with the aims of Islamic education. The principles of ṣidq (truthfulness), amānah (trustworthiness), mas'ūliyyah (responsibility), and tabayyun (verification) are relevant foundations for responsible AI use in Islamic education (Ibrohim et al., 2026).

State of the Art and Critical Synthesis

1. **Educators as Agents of Change and Innovation**

Research on teacher agency shows that educators are not merely policy implementers; they interpret circumstances, exercise professional judgment, and develop teaching practices in response to context. The concept of change agency extends this perspective by emphasizing educators' potential to contribute actively to educational change. Pantić (2026) argues that teachers' capacity to act as change agents is related to professional development and to the social and institutional conditions that enable agency to be mobilized for change.

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A systematic review by Brown, White, and Kelly (2021) indicates that research on teachers as change agents has often focused on top-down change, while teachers' capacity to initiate change from within their own professional practice has received comparatively less attention. This suggests that the central question is no longer simply whether educators can adapt to change, but how their capacities can be directed toward generating innovation.

Agency is also relevant in higher education, where lecturers' professional development and responses to change are shaped by professional identity, social relationships, leadership, policy, and institutional conditions (Cong-Lem, 2026). Agency thus offers a useful conceptual basis for understanding teachers and lecturers as change agents, while recognizing that their work takes place in different institutional contexts.

2. Innovation Agents in PAI Learning

Research explicitly examining PAI educators as innovation agents has begun to emerge. Supriadi, Muhammad, and Ahyar (2025) found that PAI teachers at MAN 2 Mataram acted as initiators, designers, implementers, evaluators, and disseminators of technology-based learning innovations. Their study also used TPACK to explain the integration of technology, pedagogy, and content.

This study provides an important foundation and demonstrates that the role of PAI teachers as innovation agents is not an entirely unexplored concept. However, it focuses on teachers' practices in a single madrasah and primarily on the implementation of technology-based innovation. A conceptual opportunity remains to integrate the functions identified in such studies into a framework that explains educators' strategic capacities across the entire innovation process from interpreting change to evaluating and reflecting on transformation.

Research by Wedi, Mardiana, and Umiarso (2025) on the digital transformation of PAI likewise indicates that learning transformation involves instructional design, educator competence, institutional strategies, collaboration, and the preservation of Islamic values. These findings reinforce the argument that PAI transformation cannot be reduced to technology use; it requires the integration of technology, pedagogy, context, and the values of Islamic education.

3. Fragmentation in the Literature and the Research Gap

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The literature can be synthesized into four major areas of knowledge. First, teacher agency explains educators' capacity to act within particular contexts. Second, change agency explains educators' involvement in processes of change. Third, TPACK and digital competence provide a foundation for integrating technology with pedagogy and learning content. Fourth, research on the digital transformation of PAI emphasizes institutional context, instructional design, collaboration, and the values of Islamic education.

Although each perspective makes a substantial contribution, they have not been fully integrated into a single construct explaining how educators' capacities connect across the stages of interpreting change, initiating innovation, designing learning, managing technology and knowledge, maintaining ethical-spiritual orientation, building collaboration, and evaluating change. Accordingly, the research gap addressed by this article is not the absence of research on teachers as innovation agents. Rather, it is the lack of an integrated conceptual framework that positions PAI teachers and lecturers as strategic actors in learning innovation. Supriadi et al. (2025) empirically demonstrate the functions of PAI teachers as innovation agents in a madrasah context, but do not develop a cross-contextual conceptual framework that integrates agency, innovation, digital-pedagogical competence, PAI values, collaboration, and reflection within a single process of transformation.

This gap creates three areas for conceptual development. First, agency, innovation, digital-pedagogical competence, and the capacity to manage change need to be integrated. Second, the framework should encompass PAI teachers and lecturers while acknowledging the differences between school/madrasah and higher education contexts. Third, epistemic and ethical-spiritual dimensions need to be strengthened so that PAI innovation is not reduced to technology use but remains directed toward pedagogical aims and the values of Islamic education.

4. The Position and Novelty of This Article

This article offers a conceptual reconstruction of the roles of PAI teachers and lecturers as Innovation Agents. It does not seek to create a concept entirely detached from previous scholarship; instead, it integrates components that have generally been developed separately. Teacher agency provides the foundation for educators' capacity to act (Priestley et al., 2015), while change agency emphasizes educators' involvement in educational change (Pantić, 2026). TPACK provides a basis for integrating technology,

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pedagogy, and content (Mishra & Koehler, 2006). In PAI, digital transformation also requires attention to instructional design, educator competence, collaboration, institutional strategies, and the preservation of Islamic values (Wedi et al., 2025).

The synthesis defines Innovation Agent as educators' strategic capacity to interpret change, identify needs, initiate innovation, design learning, curate technology and knowledge, maintain ethical-spiritual orientation, foster collaboration, and continuously evaluate and reflect on change. The novelty of the article therefore lies in conceptual reconstruction and integration, not in claiming that every component is new. It shifts the perspective from educators as learning implementers and users of innovation to educators as strategic actors who direct learning transformation.

In the context of PAI, transformation is not treated as an automatic consequence of technological development but as a pedagogical process requiring consideration of technology, knowledge, context, ethics, and the aims of Islamic education. This position provides the basis for formulating the dimensions of the Innovation Agent role and a model for PAI learning transformation.

Table 1. Previous Research and the Conceptual Position of This Article

Study / Perspective	Main Focus	Limitation or Unintegrated Area	Reconstruction Proposed in This Article
Biesta et al. (2015); Priestley et al. (2015)	Teacher agency and educators' capacity to act	Do not specifically develop an Innovation Agent framework for PAI transformation	Agency is treated as the foundation of educators' capacity to act.
Brown et al. (2021)	Teachers as agents of educational change	Focuses on change agency and educational change in general	Connects change capacity with the innovation process in PAI.
Mishra & Koehler (2006)	Integration of technology, pedagogy, and content	Does not specifically explain the Innovation Agent role in PAI	TPACK provides the foundation for the Learning Designer dimension.

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Supriadi et al. (2025)	PAI teachers as innovation agents	Based on MAN 2 Mataram and does not develop a cross-contextual conceptual framework	Reconstructs innovation-agent functions into a seven-dimensional framework.
Cong-Lem (2026)	Agency in higher education	Examines lecturer agency but does not develop a PAI Innovation Agent framework	Uses lecturer agency to extend the framework beyond schoolteachers.
Wedi et al. (2025)	Digital transformation of PAI	Emphasizes digital transformation without integrating the seven capacities into one innovation-agent framework	Positions PAI transformation within the Innovation Agent framework.

The comparison indicates that previous studies provide important components for constructing the Innovation Agent framework, but these components remain distributed across different conceptual approaches. Teacher agency explains educators' capacity to act in context (Priestley et al., 2015); change agency explains their involvement in educational change (Pantić, 2026); TPACK provides a basis for integrating technology, pedagogy, and content (Mishra & Koehler, 2006); and Supriadi et al. (2025) empirically demonstrate PAI teachers' innovation-agent functions. This article does not merely repeat those functions. It integrates them with epistemic, ethical-spiritual, collaborative, and reflective dimensions within a seven-dimensional framework. Its contribution lies in connecting these components in a single conceptual construct specifically directed toward PAI learning transformation and encompassing both teachers and lecturers.

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Reconstructing the Roles of Teachers and Lecturers as Innovation Agents

Based on the preceding synthesis, reconstructing the roles of teachers and lecturers as Innovation Agents involves a shift in professional orientation: from simply implementing learning and using innovation to interpreting change, initiating innovation, designing learning, managing technology and knowledge, fostering collaboration, and evaluating change. This reconstruction does not establish a new professional identity; rather, it develops strategic capacities as an integral part of educators' professional practice. Teacher agency provides an important foundation by positioning educators as active actors within particular social, institutional, and material contexts (Priestley et al., 2015). In PAI, this capacity must be broadened because innovation cannot be evaluated solely in terms of technology use or methodological novelty. It must also take into account pedagogical objectives, knowledge quality, attitude formation, and the values of Islamic education.

Research on PAI teachers as innovation agents shows that educators already perform functions such as initiating, designing, implementing, evaluating, and disseminating technology-based learning innovations (Supriadi et al., 2025). While that research identifies innovation-agent functions in a specific madrasah context, the reconstruction proposed here connects those functions with interpreting change, learning design, technology and knowledge curation, ethical-spiritual judgment, collaboration, and reflection. These are treated as interrelated capacities rather than as a list of separate tasks. The analytical emphasis consequently shifts from identifying innovation-agent functions to constructing the relationships among capacities that shape the Innovation Agent role in PAI learning transformation (Supriadi et al., 2025; Priestley et al., 2015; Pantić et al., 2022).

1. **The Seven Dimensions of the Innovation Agent Role**

   The literature synthesis resulted in seven proposed dimensions of the Innovation Agent role. These dimensions are a conceptual reconstruction rather than a standardized classification derived from any single theory. Together, they describe interconnected capacities for directing the transformation of PAI learning.

   Change Reader: Interpreting Change and Learning Needs

   Change Reader refers to educators' ability to understand changes in learner characteristics, technological developments, curriculum demands, and the ways knowledge is accessed and used. Educators do not merely recognize that change is

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occurring; they identify learning problems and determine where innovation is needed. This capacity is connected to agency because professional action is shaped by the context in which educators work (Priestley et al., 2015).

In PAI, this dimension includes understanding how learners access religious information, use digital media, and develop Islamic understanding. In practice, PAI teachers and lecturers need to interpret changes in learner characteristics, technological developments, learning needs, and the social and academic environment before deciding what form of innovation to pursue. Reading change therefore provides a basis for professional agency: educators do not immediately adopt an innovation but first identify the changes and needs that should inform innovative decisions (Priestley et al., 2015).

Innovation Initiator: Initiating Change

Innovation Initiator refers to the capacity to translate learning problems into innovative ideas and actions. Rather than waiting for innovations to be introduced by policymakers or institutions, educators can take initiative in response to learning needs. Research on teacher agency for change highlights the importance of professional and epistemic networks in supporting educators as they develop change (Pantić et al., 2022). Teachers and lecturers thus act as initiators of change relevant to the context of PAI learning.

In practice, this dimension involves translating identified learning problems into ideas or alternative actions that can be tested and developed. Educators are not merely users of existing innovations; they exercise agency by initiating changes suited to their learning contexts. From a change-agency perspective, educators' participation in educational change is related to their capacity to act and develop change within the social and institutional conditions they encounter (Pantić et al., 2022). Innovation initiation is therefore understood as an active process through which educators begin and develop changes in learning.

Learning Designer: Designing Learning Transformation

Learning Designer refers to the ability to translate innovative ideas into learning designs. Educators need to consider learning objectives, learner characteristics, content, methods, technology, and the learning context. TPACK establishes that technology should

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be integrated with pedagogy and content rather than used as a standalone component (Mishra & Koehler, 2006). In PAI, learning design must also support the development of knowledge, attitudes, character, and Islamic values.

In practice, PAI teachers and lecturers design learning experiences that connect learning objectives, subject matter, pedagogical strategies, learner activities, assessment, and technology. This integration requires attention to the relationships among content knowledge, pedagogy, and technology so that technology supports the achievement of learning objectives (Mishra & Koehler, 2006). Learning innovation is therefore not defined merely by the adoption of new media or technology, but by educators' ability to design coherent relationships among learner needs, PAI content, pedagogical approaches, and technological tools.

Digital and Epistemic Curator: Curating Technology and Knowledge

Digital and Epistemic Curator refers to the ability to select and use technologies and knowledge sources that are relevant, credible, and appropriate to learning objectives. This role is increasingly important because digital environments provide access to a wide range of information. In PAI learning, educators must consider not only which technologies to use but also the quality, validity, and suitability of religious knowledge sources in relation to educational objectives.

In practice, this dimension involves selecting, checking, organizing, and using digital resources and knowledge sources relevant to learning objectives. In the context of digital transformation and AI, educators need more than the ability to operate technology; they must also assess the quality and relevance of information used in PAI learning (Faridah et al., 2026). Educators thus serve as curators who connect emerging digital learning resources with the epistemic requirements of instruction, ensuring that technology is used selectively and does not replace professional academic judgment.

Ethical-Spiritual Gatekeeper: Safeguarding Ethical Direction and Islamic Educational Values

Ethical-Spiritual Gatekeeper highlights a distinctive feature of the Innovation Agent role in PAI. Innovation should not be evaluated solely in terms of novelty and efficiency but also in relation to the aims and values of Islamic education. Research on the

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digital transformation of PAI in the AI era indicates that technological development needs to be accompanied by stronger educator competence, sound learning design, and the preservation of Islamic values (Wedi et al., 2025). Educators therefore serve as value-oriented guides who ensure that innovation remains within appropriate ethical, pedagogical, and spiritual boundaries.

In practice, this dimension means that PAI teachers and lecturers consider ethical and spiritual implications before adopting or developing learning innovations. Technology and digital resources should be evaluated in relation to the aims of Islamic education, rather than only in terms of novelty or efficiency. This includes assessing information credibility, responsible technology use, and the compatibility of AI applications with the ethical principles of Islamic education. The principles of ṣidq, amānah, mas'ūliyyah, and tabayyun can provide a basis for guiding responsible AI use without neglecting the value dimension of PAI learning (Ibrohim et al., 2026). Educators thus act as safeguards, ensuring that innovation remains pedagogically, ethically, and spiritually grounded.

Collaborative Change Maker: Mobilizing Change through Collaboration

Collaborative Change Maker emphasizes that innovation should not be an exclusively individual undertaking. Change requires knowledge exchange, peer support, leadership, and a professional environment in which innovation can develop. Research on teachers as change agents highlights the importance of social networks and collaboration in expanding educators' capacity to bring about change (Pantić et al., 2022). Teachers and lecturers therefore need to collaborate with colleagues, institutional leaders, learners, academic communities, and other relevant stakeholders.

In practice, PAI teachers and lecturers participate in networks of change involving peers, school or university leaders, academic communities, and other relevant stakeholders. Innovation is not understood as an individual act alone because the sustainability of change is influenced by social relationships, institutional conditions, and the support available in educators' working environments. The ecological perspective on teacher agency demonstrates that educators' actions are connected to social and structural contexts that may enable or constrain them (Priestley et al., 2015). The ability to build collaboration is consequently an essential component of educators' capacity as agents of change.

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Reflective Evaluator: Evaluating and Reflecting on Change

Reflective Evaluator refers to the ability to assess innovation processes and outcomes and use the findings to improve subsequent practice. Innovation should not be considered successful merely because technology has been used or a new method implemented; its value depends on whether it improves learning experiences and supports the achievement of learning objectives. Reflection makes evaluation part of the innovation cycle, allowing the results to inform a renewed interpretation of change and the next course of action.

In practice, PAI teachers and lecturers assess the processes and outcomes of innovations, identify successes and constraints, and use the findings to improve subsequent actions. Reflection is not treated as a final stage separate from innovation, but as part of an ongoing cycle of change through which educators reconsider decisions and develop responses better suited to the learning context. Agency and change-agency perspectives recognize reflection and learning from experience as important to the development of educators' capacity to effect change (Pantić et al., 2022).

Table 2. Practical Reconstruction of the Seven Innovation Agent Dimensions in PAI Learning

Dimension	Core Capacity	Practical Expression for PAI Teachers/Lecturers	Supporting Literature
Change Reader	Interpreting change and learning needs	Identifying changes in learner characteristics, learning needs, technological developments, and problems requiring innovation	Priestley et al. (2015)
Innovation Initiator	Initiating change	Translating learning problems into ideas, alternative actions,	Pantić et al. (2022)

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		and innovations that can be tested	
Learning Designer	Designing innovative learning	Integrating objectives, content, pedagogy, activities, assessment, and technology	Mishra & Koehler (2006)
Digital and Epistemic Curator	Curating technology and knowledge	Selecting, checking, organizing, and using relevant digital resources and knowledge sources	Faridah et al. (2026)
Ethical-Spiritual Gatekeeper	Safeguarding value alignment	Assessing the alignment of innovations and technologies with the aims, values, and character of Islamic education	Wedi et al. (2025)
Collaborative Change Maker	Building collaborative change	Working with colleagues, leaders, academic communities, and relevant stakeholders to develop innovation	Priestley et al. (2015); Pantić et al. (2022)
Reflective Evaluator	Evaluating and improving innovation	Assessing innovation outcomes, identifying constraints, and using evaluation findings to improve subsequent action	Pantić et al. (2022)

The mapping shows that the seven Innovation Agent dimensions do not operate as separate functions; they form a connected sequence of capacities. Change Reader

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provides the basis for identifying changes and needs, after which Innovation Initiator translates that understanding into ideas for change. Learning Designer turns those ideas into learning designs, while Digital and Epistemic Curator ensures that the technologies and knowledge sources selected are relevant and of sufficient quality. In PAI, this process is guided and bounded by Ethical-Spiritual Gatekeeper to ensure alignment with the values of Islamic education. Collaborative Change Maker then supports the development of innovation through social and institutional networks, while Reflective Evaluator ensures that experience gained during implementation informs subsequent improvement (Faridah et al., 2026; Mishra & Koehler, 2006; Pantić et al., 2022; Priestley et al., 2015; Wedi et al., 2025). The seven dimensions can thus be understood as a practical construct through which PAI teachers and lecturers translate their capacity as Innovation Agents into context-sensitive learning practices.

Synthesizing the Reconstruction: A Cyclical Model

The seven dimensions emerge from a synthesis of teacher agency, change agency, learning innovation, technology-pedagogy integration, and educational transformation. Teacher agency explains educators' capacity to act actively within particular contexts, while change agency positions them as actors who can influence and direct educational change (Priestley et al., 2015). TPACK provides a foundation for designing learning that responds to technological developments by integrating technology and pedagogy (Mishra & Koehler, 2006). In PAI, this process needs to be strengthened by the values and aims of Islamic education so that learning transformation does not stop at digitalization (Wedi et al., 2025).

On this basis, the article reconstructs the Innovation Agent role as a cyclical process rather than a collection of independent competencies. The cycle can be represented as follows:

Change Reader → Innovation Initiator → Learning Designer → Digital and Epistemic Curator → Ethical-Spiritual Gatekeeper → Collaborative Change Maker → Reflective Evaluator → Change Reader

The cycle indicates that interpreting change provides the basis for identifying needs and initiating innovation. Innovation is then translated into learning design, accompanied by the selection of appropriate technologies and knowledge sources. It is subsequently

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guided by ethical-spiritual considerations, developed through collaboration, and evaluated reflectively to inform further improvement. This cyclical pattern is consistent with the view that educator agency involves taking action, interacting with context, and reflecting on practice and ongoing change (Pantić et al., 2022).

Accordingly, Innovation Agent is defined in this article as the strategic capacity of teachers and lecturers to interpret change, initiate innovation, design learning, curate technology and knowledge, safeguard ethical-spiritual orientation, mobilize collaboration, and continuously evaluate and reflect on change. This definition is a conceptual reconstruction based on the relationships among perspectives that have previously developed in a fragmented manner (Supriadi et al., 2025).

In the context of PAI, this reconstruction positions teachers and lecturers not merely as technology users or implementers of innovation policies, but as strategic actors in learning transformation. Transformation is understood as a change in the quality of the learning process that integrates pedagogical, digital, epistemic, ethical, and spiritual dimensions. From this perspective, PAI learning innovation is directed not only toward methodological or media novelty but toward creating learning experiences that are more relevant, meaningful, and consistent with the aims of Islamic education (Wedi et al., 2025).

CONCLUSION

This article demonstrates that the transformation of Islamic Religious Education (PAI) learning requires a shift in the role orientation of teachers and lecturers, from merely implementing instruction and using innovations to becoming actors capable of identifying, initiating, directing, and evaluating change. Based on a critical literature review and conceptual analysis of studies on teacher agency, change agency, educational innovation, Technological Pedagogical Content Knowledge (TPACK), digital competence, and the transformation of PAI in the AI era, this article reconstructs the concept of the Innovation Agent as a strategic capacity embedded in the professional practice of PAI teachers and lecturers.

This reconstruction yields seven interrelated dimensions: Change Reader, Innovation Initiator, Learning Designer, Digital and Epistemic Curator, Ethical-Spiritual Gatekeeper, Collaborative Change Maker, and Reflective Evaluator. These dimensions are not conceived as independent functions but as a sequence of interconnected capacities that form a cycle,

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beginning with identifying changes and needs, initiating innovation, designing learning, curating technology and knowledge, maintaining ethical and spiritual orientations, fostering collaboration, and ultimately evaluating and reflecting on change. This reconstruction broadens the understanding of the Innovation Agent by integrating agency, innovation, technology and pedagogy, epistemic awareness, ethical-spiritual responsibility, collaboration, and reflection within the context of PAI learning.

Conceptually, this article provides a framework that can serve as a foundation for the professional development of PAI teachers and lecturers as they respond to an increasingly digital and AI-driven educational landscape. The seven dimensions can be further developed through empirical research across schools, madrasahs, and higher education institutions to examine how this conceptual reconstruction is implemented, adapted, and further developed in PAI teaching and learning practices.

FUTURE DIRECTIONS

Future research should further explore how the reconstructed role of PAI teachers and lecturers as Innovation Agents can be developed and implemented in diverse educational contexts. Particular attention should be given to the factors that shape educators' capacity to identify educational changes, initiate pedagogical innovation, design meaningful learning experiences, and evaluate the impact of innovation on students' learning outcomes. Further studies could examine how professional development, institutional support, educational leadership, and school or university culture influence the development of educators' agency and their capacity to act as agents of innovation in PAI learning.

In addition, future research should investigate how the seven proposed dimensions—Change Reader, Innovation Initiator, Learning Designer, Digital and Epistemic Curator, Ethical-Spiritual Gatekeeper, Collaborative Change Maker, and Reflective Evaluator—are manifested in actual teaching practices. Empirical studies across schools, madrasahs, and higher education institutions could assess the relevance, applicability, and interrelationships of these dimensions in different educational settings. Such research could also explore how educators integrate pedagogical innovation, digital technologies, and artificial intelligence while maintaining the ethical and spiritual values that constitute the foundation of PAI.

Furthermore, given the increasing integration of digital technologies and AI into education, future studies should examine how PAI teachers and lecturers can critically select,

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adapt, and evaluate technological tools without compromising the epistemic integrity, ethical responsibility, and spiritual orientation of Islamic education. Particular attention should be paid to the challenges associated with digital competence, the reliability of AI-generated information, academic integrity, and the development of students' critical and reflective capacities. Comparative research could also investigate differences in the implementation of the Innovation Agent framework across educational levels, institutional contexts, and sociocultural settings to identify context-sensitive approaches to educational transformation.

Finally, future research could develop and empirically validate indicators or assessment instruments for measuring educators' capacities across the seven dimensions. Longitudinal and intervention-based studies would be particularly valuable for examining how these capacities develop over time and how they influence pedagogical practices, student engagement, and the quality of PAI learning. Such investigations would provide a stronger empirical foundation for the proposed conceptual framework and help translate the reconstruction of the Innovation Agent role into practical strategies for professional development, institutional policy, and sustainable transformation of Islamic Religious Education in the digital and AI era.

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