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How Does Thomas Kuhn Explain Islamic Educational Transformation at MAN Insan Cendekia?

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ABSTRACT

The transformation of Islamic education requires madrasahs to integrate academic excellence, Islamic values, a culture of research, and learning innovation without maintaining the dichotomy between religious and general studies. However, empirical research explaining the transformation of Islamic education in leading madrasahs through the lens of Thomas S. Kuhn's paradigm shift remains limited. This study aims to analyze the paradigm shift in Islamic education at MAN Insan Cendekia Tanah Laut, South Kalimantan, using this perspective. The study employs a qualitative, naturalistic-paradigm approach, utilizing field research and an intrinsic case study design. Data were collected through in-depth interviews, participatory observation, and document analysis involving the madrasah principal, vice principal, teachers, dormitory supervisors, and students. Data analysis was based on the interactive model proposed by Miles, Huberman, and Saldaña, while the credibility of the findings was strengthened through triangulation, member checking, peer discussion, and adequate researcher involvement. The findings indicate that this transformation is realized through an integrative curriculum, research-based learning, academic and religious guidance within the boarding school system, the development of student leadership, and the utilization of educational technology. This study formulates a conceptual model of an integrative, high-quality Islamic education that connects leadership, the integration of knowledge, a culture of research, the boarding school system, and learning innovations.

Keyword
Islamic education paradigm; superior madrasah; Thomas Kuhn; boarding school; integration of science and Islam

Abstrak

Transformasi pendidikan Islam menuntut madrasah mengintegrasikan keunggulan akademik, nilai-nilai keislaman, budaya riset, dan inovasi pembelajaran tanpa mempertahankan dikotomi ilmu agama dan ilmu umum. Namun, penelitian empiris yang menjelaskan transformasi pendidikan Islam pada madrasah unggulan melalui perspektif pergeseran paradigma Thomas S. Kuhn masih terbatas. Penelitian ini bertujuan menganalisis transformasi paradigma pendidikan Islam di MAN Insan Cendekia Tanah Laut, Kalimantan Selatan, dengan menggunakan perspektif tersebut. Penelitian menggunakan pendekatan kualitatif berparadigma naturalistik dengan jenis penelitian lapangan dan rancangan studi kasus intrinsik. Data dikumpulkan melalui wawancara mendalam, observasi partisipatif, dan studi dokumentasi yang melibatkan

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kepala madrasah, wakil kepala madrasah, guru, pembina asrama, dan peserta didik. Analisis data mengacu pada model interaktif Miles, Huberman, dan Saldaña, sedangkan kredibilitas temuan diperkuat melalui triangulasi, pemeriksaan anggota, diskusi sejawat, dan keterlibatan peneliti yang memadai. Temuan menunjukkan bahwa transformasi diwujudkan melalui kurikulum integratif, pembelajaran berbasis riset, pembinaan akademik dan religius dalam sistem asrama, pengembangan kepemimpinan siswa, serta pemanfaatan teknologi pembelajaran. Penelitian ini merumuskan model konseptual pendidikan Islam unggulan integratif yang menghubungkan kepemimpinan, integrasi ilmu, budaya riset, sistem asrama, dan inovasi pembelajaran.

Kata Kunci Paradigma pendidikan Islam; Madrasah unggulan; Thomas Kuhn; *boarding school*; integrasi sains dan Islam.

INTRODUCTION

Islamic education faces growing demands arising from advances in science and technology, globalization, and the changing competencies required in the twenty-first century. Madrasahs are increasingly expected to move beyond the transmission of religious knowledge and develop graduates who demonstrate academic excellence, scientific literacy, critical thinking, and strong Islamic character (Ainissyifa et al., 2024; Momen, A., & Islam, M. K., 2025; Sumanti et al., 2024). These demands have encouraged the development of more integrative, adaptive, and globally oriented approaches to Islamic education (Adiyono et al., 2026; Mardatillah, F., et al., 2025). Within this context, superior madrasahs have become important institutional models for improving educational quality while responding to the challenges of the Fourth Industrial Revolution and the emergence of a knowledge-based society (Amalia et al., 2025; Romlah et al., 2025; Zakariyah, Z., 2024). Understanding how these institutions develop and implement their educational approaches is therefore essential for explaining the transformation of contemporary Islamic education.

The transformation of Islamic education can be examined through Thomas S. Kuhn's concept of paradigm shift. Kuhn explains scientific development as a process in which established paradigms encounter anomalies that existing assumptions and practices cannot adequately resolve, potentially leading to a new framework of understanding (Chen et al., 2026; Kashtan et al., 2026). Applied cautiously to Islamic education, this perspective provides an analytical lens for examining changes in educational assumptions, institutional practices, and approaches to knowledge. An integrative paradigm seeks to establish meaningful relationships between Islamic revelation, scientific inquiry, technological development, and character formation rather than treating religious and general knowledge as disconnected domains (Sidik et al., 2024; Alsuhaymi, A. O., & Atallah, F., 2025; Santeri et al., 2025). However, the existence of educational innovation does not automatically demonstrate a Kuhnian paradigm shift. Such a claim requires evidence of changes in the underlying assumptions, established practices, and institutional arrangements that guide educational activities.

In Indonesia, government policies have supported madrasa development through quality improvement initiatives, curriculum strengthening, educational digitalization, and the development of academically competitive institutions (Sumanti et al., 2024; Padil et al., 2025). MAN Insan Cendekia represents a relevant institutional context because its educational orientation combines scientific development, Islamic values, research activities, and a residential learning environment (Darwanto et al., 2024; Sidik et al., 2024). These characteristics provide opportunities to examine how academic achievement is pursued alongside religious development and character formation (Haryanto et al., 2025; Mahmud, M.

E., & Malik, L. R., 2024). Consequently, MAN Insan Cendekia Tanah Laut, South Kalimantan, offers an important empirical setting for investigating how an integrative approach to Islamic education is interpreted and enacted through institutional policies, classroom practices, research activities, and boarding school culture (Fauzi et al., 2025). Examining these interconnected practices can help distinguish formal educational aspirations from the changes that participants actually experience in everyday institutional life.

Previous studies have addressed several dimensions of this educational development. Research on the integration of science and religion has examined curriculum design and the relationship between Islamic knowledge and contemporary scientific disciplines (Aminullah et al., 2025; Arroisi et al., 2025). Other studies have discussed character education, boarding school culture, and institutional management, generally highlighting their contributions to religious development and educational quality (Muhajir et al., 2025). Research on research-based learning and student-centered approaches has also emphasized the development of critical thinking, creativity, and scientific literacy (Al-Thani, N., & Ahmad, Z., 2025; Bhardwaj et al., 2025; Elfiyenti, 2024; Pinar et al., 2025). Nevertheless, these research strands do not necessarily explain how the different dimensions interact within a single institutional framework or whether their implementation reflects a deeper transformation of educational assumptions. Three gaps consequently remain. First, the application of Kuhn's paradigm-shift perspective to the empirical study of Islamic education in superior madrasahs remains insufficiently developed. Second, the relationship among curriculum integration, learning practices, research culture, leadership, and boarding school arrangements requires a more comprehensive institutional analysis. Third, further empirical investigation is needed to explain how these dimensions are implemented and connected within MAN Insan Cendekia Tanah Laut. These gaps limit current understanding of the processes through which an integrative educational orientation develops and becomes embedded in institutional practice (Clack et al., 2025; Fogaça et al., 2025; Hope et al., 2025).

To address these gaps, this study aims to analyze the transformation of Islamic education at MAN Insan Cendekia Tanah Laut through the analytical perspective of Thomas Kuhn's paradigm-shift theory. Specifically, it examines how educational assumptions are expressed in curriculum development, classroom learning, the integration of science and Islamic values, research culture, institutional leadership, and boarding school practices. The study investigates whether the observed developments represent pedagogical and organizational innovations or provide evidence of a more fundamental change in the institution's educational orientation. Its theoretical contribution lies in extending the discussion of paradigm transformation in Islamic education through an empirically grounded analysis of institutional practices. Its practical contribution is the formulation of an integrative Islamic excellence education model that connects academic development, Islamic values, research culture, educational innovation, leadership, and character formation. The findings are expected to inform the development of superior madrasahs seeking to strengthen academic quality and scientific engagement while maintaining their Islamic educational identity.

METHOD

This study uses a qualitative approach with the paradigm of naturalistic inquiry (Lincoln, Y. S., & Guba, E. G. (1985), to understand in depth the transformation of the paradigm of Islamic education in MAN Insan Cendekia Tanah Laut, South Kalimantan. This paradigm was chosen because it allows phenomena to be studied in their natural context without manipulation, by emphasizing the meaning of the experiences of educational actors.

The approach used is the phenomenology of Edmund Husserl (Moustakas, C., 1994), which seeks to reveal the essence of informants' lived experiences through the principle of epoche or bracketing, so that interpretation is based on the participant's experience (Creswell, J. W., & Poth, C. N., 2024). This research is a field research (Norman K. Denzin, & Yvonna S. Lincoln (Eds.)., 2018) with an intrinsic case study design (Stake, R. E., 1995), because MAN Insan Cendekia Tanah Laut is seen as a representative case in explaining the paradigm shift of Islamic education towards superior madrasas based on the integration of science, Islamic values, research culture, and boarding school system.

The research was carried out for approximately three months. The researcher acts as the main instrument supported by semi-structured interview guidelines, observation sheets, field notes, recording tools, digital cameras, and document analysis formats. Informants were selected by purposive sampling, including the Head of Madrasah, Deputy Head of Madrasah for Curriculum, Deputy Head of Madrasah for Student Affairs, senior teachers, subject teachers, dormitory coaches, and students involved in superior programs. Data were collected through in-depth interviews, participatory observations, and documentation studies on the vision-mission, curriculum, quality assurance documents, achievement reports, and madrasah flagship programs. The research instrument was developed based on Thomas Kuhn's Paradigm Shift theory, the Islamic education paradigm, and the results of previous research studies, then reviewed by Islamic education experts and qualitative research methodologies to ensure the validity of the content (Lawshe, C. H., 1975).

Data analysis followed the interactive model of Miles, Huberman, and Saldaña (2020), comprising data condensation, data display, and conclusion drawing and verification. First, interview recordings were transcribed verbatim, while observation notes and relevant institutional documents were organized into a structured dataset. Second, the researcher conducted initial coding by identifying statements, observed practices, and documentary evidence related to the research focus, including curriculum integration, Islamic values, research culture, learning innovation, leadership, and boarding school practices. Related codes were subsequently grouped into categories and developed into analytical themes. Third, the themes were organized into narrative descriptions, thematic matrices, and evidence tables to identify relationships between institutional policies, educational practices, and participants' experiences. Fourth, the emerging findings were interpreted using Thomas S. Kuhn's paradigm-shift perspective to examine whether the observed developments represented isolated educational innovations or more fundamental changes in the assumptions and practices underlying Islamic education. Finally, conclusions were continuously verified by comparing interview accounts with observational evidence and institutional documents, examining contradictory evidence, and conducting member checking with relevant participants. The analysis proceeded iteratively, allowing emerging interpretations to inform further examination of the data. This procedure provided a systematic basis for explaining the characteristics and empirical manifestations of Islamic educational transformation at MAN Insan Cendekia Tanah Laut.

RESULTS&DISCUSSION

The results of this research were obtained through in-depth interviews, participatory observations, and documentation studies at MAN Insan Cendekia Tanah Laut, South Kalimantan. Data analysis shows that the transformation of the Islamic education paradigm takes place systematically through changes in the perspective of curriculum, learning, academic culture, character development systems, and institutional governance. All findings

lead to a paradigm shift as stated by Thomas Kuhn, namely a change from a conventional madrasah model to a superior madrasah that integrates science, Islamic values, research culture, technology, and the boarding school system. Based on the results of data reduction, categorization, and synthesis, five main themes were found as presented in Table 1.

Table 1. Summary of Research Findings

Focus of Findings	Observation Results	Interview Results	Documentation Results	Meaning of Findings
Learning transformation	Active learning, discussions, projects	Teachers implement inquiry and project-based learning	Research-based learning modules	Shift towards constructivist learning
Integration of science and Islam	Qur'anic verses are integrated into learning	The head of the madrasah emphasizes the unity of knowledge	Integrative curriculum	There is an integration of Islamic-modern epistemology
Research culture	Active research club	Teachers guide students' research	KIR achievements and publications	Formation of a scientific culture
Boarding school	Character development lasts 24 hours	Hostel builders emphasize habituation	Dorm schedule	Education takes place holistically
Student leadership	Active student organizations	Wakasis explained leadership development	OSIM programs and hostel organizations	Leadership becomes a hidden part of the curriculum

Table 1 shows that the transformation of the educational paradigm does not only occur in the curriculum aspect, but also includes learning, academic culture, boarding life, and leadership development. All of these components interact with each other to form a complete superior Islamic education system.

Viewed through the lens of Thomas S. Kuhn's paradigm shift perspective, these findings suggest that the educational transformation at MAN Insan Cendekia Tanah Laut entails a reorientation of educational priorities, institutional practices, and conceptions of knowledge. The integration of science with Islamic values, research-based learning, the cultivation of character traits typical of *pesantren* (Islamic boarding schools), and the fostering of student leadership signify a shift from an educational model primarily centered on the transmission of knowledge toward a framework that emphasizes inquiry, the integration of knowledge, and holistic student development. This transformation appears to be facilitated by the interplay between institutional leadership, an integrative curriculum, research-oriented practices, and sustained character development within the *pesantren* environment. These interconnected practices serve as the foundation for institutionalizing this new educational orientation through daily instruction, academic activities, and student life. However, Kuhn's theory also necessitates caution in analysis: the mere presence of educational innovations does not, in itself, signify a full-fledged paradigm shift. Such a claim requires empirical evidence regarding the limitations of the preceding educational framework, the emergence of tensions or inadequacies that triggered the change, and an institutional embrace of a framework that is substantially different. Therefore, these findings are best interpreted as evidence of the emergence of an integrative Islamic educational paradigm; whether this transformation

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qualifies as a Kuhnian paradigm shift depends on the availability of evidence demonstrating a fundamental change in the core assumptions and established practices within the institution.

Transforming Learning Models from Teacher-Centered to Research-Based Learning

The results of observations show that the learning process at MAN Insan Cendekia Tanah Laut has shifted from a lecture approach to student-centered learning. Teachers play the role of facilitators, while students are encouraged to develop critical thinking skills through scientific discussions, research projects, presentations, and problem-solving.

The Deputy Head of the Madrasah for Curriculum explained:

"Our learning is no longer oriented to the delivery of material alone, but to develop the ability to think scientifically through research, discussion, and problem-solving that is relevant to students' lives."

Classroom observation shows the use of *project-based learning*, *inquiry learning*, *problem-based learning*, and presentation of student research results. The documentation of the lesson plan and learning modules reinforces that this approach has become the academic policy of the madrasah.

Table 2. Changes in Learning Models

Before	After
Teacher centered	Student centered
Lecture	Inquiry Learning
Memorization	Project Based Learning
Memorization evaluation	HOTS Evaluation
Teachers as the main source	Teachers as facilitators

This table shows a fundamental change in the learning paradigm from knowledge transmission to knowledge construction through students' scientific activities. These changes in learning models not only change teachers' teaching strategies, but also form a more active, collaborative, and student-centered learning culture. The results of observations showed that students were more often involved in scientific discussions, contextual problem solving, presentation of project results, as well as simple research activities that encouraged critical and creative thinking skills. Analysis of learning documents, such as teaching modules, assessment tools, and student project portfolios, shows that the Higher Order Thinking Skills (HOTS), Inquiry Learning, and Project-Based Learning approaches have been systematically integrated into the learning process in various subjects. The findings of interviews with teachers also confirmed that these changes had an impact on increasing learning independence, scientific communication skills, and students' confidence in conveying ideas based on data and study results. Overall, these findings show that the transformation of the learning paradigm at MAN Insan Cendekia Tanah Laut has shifted from a knowledge transfer orientation to learning that places students as the main subjects in building knowledge through scientific processes, critical reflection, and meaningful learning experiences.

The Integration of Science and Islam as a New Paradigm of Education

The findings show that the integration of science and Islam has become the main identity of madrasas. The integration is seen in the curriculum, learning process, research activities, and academic culture.

The Head of the Madrasah said:

"We do not separate religious science and science. Both are understood as part of Allah's mandate to build civilization."

Observations show that teachers associate science concepts with the values of the Qur'an and Islamic ethics without reducing the depth of academic material.

Table 3. Forms of Integration of Science and Islam

Aspects	Implementation
Curriculum	Integrative
Learning	Qur'anic verses as a reinforcement of concepts
Research	Based on Islamic ethics
Character	Trust, integrity, responsibility

Integration is not symbolic, but becomes a paradigm that shapes the entire educational process. The findings confirm that the integration of science and Islam at MAN Insan Cendekia Tanah Laut is not just a curricular approach, but has developed into an educational paradigm that animates planning, implementation, and evaluation of learning (Table 3). The results of triangulation between interviews, observations, and document analysis show that there is consistency in connecting the mastery of science, strengthening Islamic character, and developing a research culture, so that students are encouraged to view science as part of a scientific mandate that is oriented towards the benefit of the people. These findings show that the integrative paradigm has succeeded in forming a holistic educational ecosystem, adaptive to the development of science and technology, while remaining rooted in the values of monotheism, so that it becomes the main characteristic of leading madrassas that are relevant to the challenges of education.

Research Culture as the Identity of Leading Madrasah

The research culture develops through the development of scientific works, research clubs, laboratories, and national and international competitions.

The senior teacher explained:

"Every student is accustomed to scientific thinking from the beginning of entry. They learn to identify problems, formulate proposals, conduct research, and present results."

Documentation shows increased student participation in research competitions and the Olympics.

Table 4. Implementation of Research Culture

Programs	Implementation
Research Club	Active
Olympics	National and International
Publications	Students' scientific work
Laboratory	Intensive use

These findings show that the research culture has developed into one of the institutional identities that distinguishes MAN Insan Cendekia Tanah Laut from madrasas in general, because the research process is systematically integrated into learning, academic coaching, and student achievement development. The results of triangulation of interviews,

observations, and document analysis show that students' active involvement in research clubs, laboratory utilization, preparation of scientific papers, and participation in national and international Olympics and research competitions have formed an academic ecosystem that encourages critical thinking, creativity, collaboration, and evidence-based problem-solving (Table 4). These findings confirm that research culture is not just a superior program, but has become a learning paradigm that supports the birth of innovation-based superior madrasas, in line with various studies that affirm the importance of developing research culture as a foundation for improving academic quality and competitiveness of Islamic educational institutions in the global era.

Boarding School as a Holistic Education System

Observations show that learning lasts for 24 hours through the integration of academic activities and dormitory life.

The Dormitory Builder conveyed:

"Students' character is built through daily habituation. Education doesn't stop when class hours are over."

The dormitory schedule document shows the integration between worship, learning, discussion, leadership, and character building.

Table 5. Boarding School Contribution

Dimensions	Implementation
Spiritual	Congregational prayer, halaqah
Academic	Night study
Social	Hostel organization
Character	Discipline and responsibility

The findings show that the boarding school system at MAN Insan Cendekia Tanah Laut not only functions as a place for students to live, but has developed into a holistic education ecosystem that integrates academic learning, spiritual coaching, leadership development, and character formation in one educational process that lasts continuously for 24 hours (Table 5). The results of triangulation between observations, interviews, and document analysis showed that the integration of worship activities, night learning, dormitory organization, discipline coaching, and intensive mentoring by teachers and dormitory coaches formed a learning environment conducive to the development of students' intellectual, emotional, social, and religious competencies. These findings confirm that the boarding school system is an important foundation in realizing a holistic Islamic education paradigm, where the process of knowledge transfer takes place in tandem with the internalization of values, habituation of morals, and strengthening leadership, so as to produce graduates who excel academically while having strong moral and spiritual integrity.

Paradigm Shift in Islamic Education Towards Leading Madrasah

The synthesis of all the findings shows that the transformation that occurred was not just a program innovation, but a paradigm shift as Thomas Kuhn's concept. The old paradigm characterized by traditional learning, the dichotomy of knowledge, and the orientation of memorization has shifted to a new paradigm that integrates science, religion, research, technology, character, and leadership in one educational ecosystem.

Table 6. Synthesis of Paradigm Shifts

Paradigm Lama	A New Paradigm
Memorization	HOTS
Teacher centered	Student centered
The dichotomy of science	Integration of knowledge
Cognitive evaluation	Holistic competence
Conventional Madrasas	Islamic Excellence School

The synthesis of findings shows that MAN Insan Cendekia Tanah Laut has undergone a transformation towards an Islamic Excellence School model that integrates science, Islamic values, research culture, boarding school system, and student leadership in one complete educational paradigm (Table 6). This shift reflects conceptual, structural, and cultural changes that are in line with Thomas Kuhn's Paradigm Shift theory and provide an empirical basis for the development of a leading Islamic education model in Indonesia.

Discussion

The results of the study show that the transformation of education at MAN Insan Cendekia Tanah Laut is not only in the form of curriculum changes, but also a change in the paradigm of Islamic education as a whole as the concept of paradigm shift by Thomas S. Kuhn. This shift can be seen in the change in learning orientation from *teacher*-centered to student-centered, from a culture of memorization to a culture of research, and from a dichotomy of science to the integration of science and Islamic values. This finding directly answers the research formulation that superior madrassas are built through a paradigm change that involves philosophical, pedagogical, cultural, and institutional dimensions simultaneously. Thus, the transformation that occurred was not partial, but formed a new education system that was more adaptive to the challenges of the 21st century while remaining rooted in Islamic values (Darwanto et al., 2024; Ubaidillah, U., & Faiz, M. F., 2025).

The findings regarding research-based learning reinforce the view of constructivism that places students as active subjects in building knowledge. Teachers no longer function as the only source of information, but rather as facilitators who encourage critical thinking, problem-solving, and collaboration skills (Bhardwaj et al., 2025; Sanam et al., 2026; Zhang, J., & Wu, Y., 2025). This condition is consistent with various international studies that show that inquiry-based learning and project-based learning increase scientific literacy, creativity, and high-level thinking skills (Bettayeb et al., 2024; Ikbal, 2025; Mwinkaar, L., & Lonibe, J.-F. Y., 2024). In this context, research shows that changes in learning paradigms are the main indicators of the success of the transformation of leading madrasas, because changes in learning culture precede changes in learning outcomes. These findings also expand on previous studies by showing that this approach can be applied effectively to boarding school-based madrasas without reducing the strengthening of Islamic identity (Nasution et al., 2024; Ma`arif et al., 2025).

The integration of science and Islam is a central finding that distinguishes MAN Insan Cendekia Tanah Laut from conventional madrasas. The research found that such integration does not stop at the insertion of Qur'anic verses in learning, but is realized through the unification of academic goals, character building, and the development of scientific culture. These results support an integrative Islamic education paradigm that views revelation and science as two complementary sources of knowledge (Erika et al., 2026). Compared to previous research that generally discussed integration at the curriculum level, this study shows

that integration takes place systemically through institutional vision, organizational culture, learning practices, and evaluation systems (Davis et al., 2024; Zainal et al., 2025). Thus, this study provides empirical reinforcement that the integration of Islamic-modern epistemology can be realized in educational practice consistently (Anhar et al., 2026; Firdaus et al., 2025; Pratama et al., 2026).

Other findings show that *the boarding school* system serves as a paradigm transformation reinforcer through education that lasts for twenty-four hours. Dormitory life not only supports academic achievement, but also becomes a medium for internalizing discipline, leadership, responsibility, and worship habits. Therefore, character building is not positioned as an additional program, but rather becomes an integral part of the educational process (Fitri, 2022; Lestari et al., 2026). These results expand on previous research that has focused more on the academic excellence of madrasas, by showing that academic success at MAN Insan Cendekia Tanah Laut is greatly influenced by the synergy between learning culture, religious culture, and a continuous character development system (Halimatussa'diyah et al.,2024; Riwanda et al., 2024).

The research culture that develops in madrassas is also an important indicator of paradigm change. Student research activities, scientific competitions, Olympiads, and scientific publications show that madrasas have moved towards a learning organization. These findings show that scientific culture is built through habituation, teacher mentoring, provision of facilities, and institutional policy support. Compared to previous research that positioned research as an extracurricular activity, this study found that research culture has become the academic identity of madrasas (Alnajjar et al., 2025; Hanun et al., 2025). This contribution shows that research-based learning can be a link between mastering science, strengthening character, and increasing the global competitiveness of students (Nguyen, T. T. K., Nguyen, D., & Da Dang, 2026).

The main theoretical contribution of this research is the refinement of Thomas Kuhn's *Paradigm Shift* concept in the context of Islamic education. If Kuhn describes paradigm change as a change in the framework of thinking in the scientific community, this study shows that the paradigm shift in Islamic education takes place through five interconnected components, namely visionary leadership, integrative curriculum, research-based learning, *boarding school* system, and quality culture. These five components form a new conceptual model that can be called the Islamic Excellence Education Paradigm, which is an Islamic education paradigm that integrates academic excellence, Islamic values, innovation, and character development in one educational ecosystem. Thus, this study not only confirms Kuhn's theory, but also modifies it so that it is more relevant to explain the institutional transformation of Islamic education (Faishal et al., 2025; Hayadin et al., 2025; Muthohirin et al., 2025).

The practical implications of this study show that the educational model of MAN Insan Cendekia Tanah Laut has the potential to be replicated in other madrassas through the strengthening of leadership, academic culture, integration of science and Islam, and a sustainable character development system. This model contributes to the development of Islamic education policies that are more adaptive to technological developments, artificial intelligence, and the needs of 21st century competencies without abandoning spiritual values (Adiyono et al., 2025; Ahmad, Z. A., 2025; Siregar et al., 2025). Thus, this research enriches the treasures of Islamic education while offering a conceptual and practical framework for the development of superior madrassas in Indonesia and countries with similar Islamic education systems.

CONCLUSIONS

This study concludes that the educational transformation at MAN Insan Cendekia Tanah Laut involves the development of an integrative Islamic educational paradigm that bridges academic excellence, Islamic values, a research culture, character building, and technological innovation within an Islamic boarding school (*pesantren*) environment. Empirical findings indicate that this orientation is reflected in curriculum integration, research-based learning, the development of academic and religious practices, student leadership activities, and the utilization of digital technology. The primary theoretical contribution of this study lies in extending the application of Thomas S. Kuhn's "paradigm-shift" perspective to the analysis of Islamic education, by illustrating how institutional leadership, curriculum, pedagogical practices, and organizational culture interact to shape an emerging educational paradigm. The study also proposes an "Integrative Paradigm Model for Excellent Islamic Education," which conceptualizes these five interconnected dimensions as a framework for understanding educational development at the institutional level. Unlike studies that examine curriculum integration, character education, research activities, or *pesantren* management in isolation, this model emphasizes the interdependence of these elements within a cohesive educational ecosystem. However, these findings point more toward an evolving integrative orientation rather than conclusively establishing a "scientific revolution" in the Kuhnian sense which would require stronger evidence regarding the limitations of the preceding paradigm, the emergence of a crisis, and institutional acceptance of a fundamentally different framework. Thus, this model serves as a context-specific conceptual contribution that expands existing perspectives on Islamic education and provides a foundation for further theoretical development.

In practical terms, these findings offer several specific recommendations. Madrasah leadership should translate this integrative paradigm into measurable institutional indicators, encompassing curriculum integration, participation in research, student character development, leadership competence, and the responsible use of technology. Curriculum coordinators and teachers are encouraged to develop interdisciplinary learning projects that connect Islamic teachings with scientific inquiry and real-world issues, while systematically documenting the learning process and student outcomes. Dormitory supervisors should coordinate character-building activities with classroom instruction, evaluating their impact through periodic student reflection, behavioral observation, and collaborative assessment. Policymakers may consider this proposed model when drafting quality assurance instruments for high-performing madrasahs, while allowing for adjustments based on institutional resources and local contexts. However, as this study focuses on a single madrasah, the applicability of its findings to other institutions with different organizational and cultural characteristics remains limited. Consequently, future research should examine this model across various madrasahs through comparative case studies, investigate implementation differences between institutions, and develop empirically-based indicators to assess the relationship between the model's components and educational outcomes. Longitudinal research could also reveal how these practices evolve over time and whether they lead to sustained improvements in academic achievement, Islamic character, research competence, and student leadership. Such investigations would strengthen the empirical foundation of this model and clarify the conditions under which an integrative Islamic educational paradigm can be effectively developed within diverse educational environments.

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DECLARATIONS

Author Contributions
Agus Zaenul Fitri, Adiyono Adiyono, and Erna Iftanti contributed to the conceptualization, methodological development, and critical intellectual refinement of this study; Adiyono Adiyono led the investigation, data analysis, and the drafting of the initial manuscript. Sokip Sokip, Kojin Kojin, and Agus Purwo Widodo contributed through critical review and scientific evaluation of the manuscript, providing substantive input to strengthen the theoretical foundation, methodological rigor, interpretation of findings, and overall academic quality.

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Conflict of Interest
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Ethical Approval
This research was conducted in adherence to ethical principles for research involving human participants, including participant consent, confidentiality of identity, and data protection.

Data Availability
The data supporting the findings of this study include interview transcripts, observation notes, and research documents that are not publicly available, in order to protect the confidentiality of participants and institutional information. Anonymized data may be requested from the corresponding author, subject to consideration of participant consent, research ethics requirements, and applicable institutional permissions.

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In the preparation of this manuscript, the author utilized OpenAI's ChatGPT to assist in structuring and refining the text, improving academic language, and enhancing the clarity and coherence of scientific arguments. The use of this AI-assisted tool was limited to writing support and did not replace the author's intellectual responsibility for data collection, the analysis of findings, or the drawing of research conclusions. All AI-generated output has been reviewed and verified by the author, who bears full responsibility for the accuracy, originality, integrity, and final content of the manuscript.

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