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Paradigms of Scientific Integration in Sumatra's State Islamic Universities

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Abstract

This article examines the paradigm of scientific integration in Islamic religious universities in Sumatra through a comparative and contextual approach. Although studies on scientific integration have grown rapidly, most remain confined to normative discussions and have not sufficiently examined how integration is constructed, interpreted, and implemented within diverse institutional contexts. Using a quasi-qualitative approach based on in-depth interviews, academic observations, document analysis, and focus group discussions (FGDs), this study explores the dynamics of scientific integration in three State Islamic Universities: UIN North Sumatra, UIN Ar-Raniry Banda Aceh, and UIN Raden Fatah Palembang. The findings show that scientific integration is not understood as a singular unification of religious and scientific disciplines, but as a multi-layered epistemological process encompassing philosophical orientations, methodological alignments, and academic practices. Variations in integration paradigms emerge according to each institution's vision, historical trajectory, and academic strategy, shaping different models of curriculum design, research orientation, and academic culture. These results indicate that the paradigm of scientific integration in Sumatra develops in a dynamic and context-dependent pattern rather than as a standardized institutional model. Beyond the local context, this study offers a reflective analytical framework for understanding scientific integration as a living epistemological process, contributing to broader discussions on Islamic higher education and contemporary global epistemological challenges.

Keywords: *Paradigm; Scientific Integration; Islamic Epistemology.*

A. Introduction

The paradigm of scientific integration has become a central discourse in the development of State Islamic Universities (Universitas Islam Negeri/UIN) in Indonesia, particularly in response to long-standing epistemological tensions between the religious and general sciences. In principle, the integrative paradigm seeks to dismantle the dichotomy between these domains by constructing a unified scientific framework that acknowledges both revelation and reason as legitimate sources of knowledge. However, recent studies indicate that integrative paradigms across UINs are not all constructed from a single epistemological foundation, but rather emerge from distinct points of departure shaped by institutional histories, intellectual authorities, and leadership visions (Hayden, 2024; Roqib & As Sabiq, 2022). As a result, the discourse of scientific integration, while normatively shared, manifests in diverse conceptual, interpretive, and operational forms across institutions.

At the level of conceptual construction, each UIN formulates scientific integration in accordance with its trajectory of institutional transformation, the dominance of particular scholarly traditions, and the strategic orientation of its academic leadership (Roqib & As Sabiq, 2022). These historical and structural conditions shape how integration is framed—whether as a philosophical commitment, an ideological project, or a pragmatic academic strategy. At the interpretive level, the integrative paradigm is understood differently by academic actors within each institution. In some campuses, scientific integration is interpreted as a normative and philosophical union between revelation and science, emphasizing ideological coherence and metaphysical harmony (Asnawi & Zuhdi, 2025). In contrast, other campuses approach integration more functionally, viewing it as a pedagogical and institutional strategy to encourage interdisciplinary collaboration and problem-oriented knowledge production (Nor et al., 2024). These differences become increasingly visible at the level of operationalization, particularly in curriculum design, research practices, and community engagement (Andi Murniati, 2025).

Institutions that succeed in translating an integrative paradigm into a coherent conceptual framework tend to develop problem-based curricula, interdisciplinary research agendas, and community service programs oriented toward social transformation. Conversely, at UINs where integration remains symbolic or rhetorical, institutions often maintain segmented curricula and conventional, discipline-bound academic practices. Without a solid analytical basis to systematically read and assess these differences, the implications for higher education are substantial. Curriculum development risks

becoming fragmented, whereby Islamic sciences and modern sciences operate in parallel without substantive methodological dialogue (Habibi, 2024; Sirojuddin et al., 2025). Such fragmentation shapes a sectoral academic culture, weakens cross-disciplinary collaboration, and inhibits the growth of research traditions responsive to contemporary socio-religious challenges (Ramli et al., 2025).

These academic consequences extend directly into the social realm. Graduates emerging from fragmented epistemological environments may possess strong normative or technical competencies in isolation, but lack the capacity to synthesize knowledge, engage in critical reflection, and address complex societal problems (Okolie et al., 2020). This epistemological gap constitutes an urgent concern, as it directly affects the ability of UIN graduates to function as agents of intellectual, moral, and social transformation within increasingly complex and turbulent social contexts. In this sense, the issue of scientific integration transcends internal academic debates and becomes a matter of broader social relevance.

Despite the significance of this issue, systematic analytical tools to compare and evaluate variations in integrative paradigms across institutions remain limited. In the absence of such frameworks, differences in scientific integration paradigms tend to develop in a fragmented manner, without adequate critical evaluation. These variations should not be understood merely as technical or administrative discrepancies, but as reflections of profoun epistemological and institutional questions—particularly concerning how revelation and reason are positioned, how Islamic sciences relate to modern sciences, and how academic policies are shaped by institutional visions and intellectual traditions.

A number of previous studies have addressed the integration of science in Islamic higher education institutions; however, most remain situated at normative, conceptual, or descriptive levels. Early works primarily focused on the philosophical ideals of knowledge integration, such as M. Amin Abdullah's concept of integration–interconnection (Abdullah, 2020), Ismail Raji al-Faruqi's Islamization of science (Shehu, 2023), and Syed Muhammad Naquib al-Attas's notion of the unity of sciences as it is articulated within contemporary UIN discourse (Al-Attas, 2023). While these studies have made significant contributions to articulating epistemological foundations, they largely rely on official documents, intellectual biographies, and policy narratives, thus offering limited insight into how integrative paradigms are interpreted and operationalized in everyday academic practice.

More recent research has begun to examine this implementation by focusing on curriculum reform, learning models, and research practices within specific UIN contexts. Case studies such as those conducted by Awang demonstrate efforts to operationalize scientific integration through structural curriculum reform and the reinforcement of Islamic sciences at the institutional level (Jaffary Awang, 2020; Haryanto et al., 2025; Amalia et al., 2025). However, these studies are generally institution-specific, limiting their capacity to provide comparative insights across universities. Consequently, scientific integration is often portrayed as following a relatively uniform trajectory, without sufficient attention to the variations shaped by institutional history, socio-cultural context, and epistemological orientation. Although some comparative studies exist, they tend to emphasize administrative or formal policy dimensions—such as vision, mission, and organizational structure—rather than examining it as a lived, negotiated epistemological framework embedded in academic practice (Dairabi Kamil et al., 2025; Rozi et al., 2023).

Based on this review, a clear research gap emerges: the lack of systematic comparative and contextual research that conceptualizes scientific integration as a dynamic paradigm shaped by the diverse epistemological and institutional contexts of UINs. This absence hampers critical evaluation and limits the potential to develop models of scientific integration that can be articulated, tested, and recognized within international academic discourse. Without such analysis, UINs risk losing opportunities to position their integrative experiences as meaningful contributions to global debates on knowledge integration, particularly from Global South perspectives.

Addressing this gap, the present study adopts a comparative and contextual approach to examine variations in the paradigm of scientific integration across three State Islamic Universities in Sumatra: UIN North Sumatra, UIN Ar-Raniry Banda Aceh, and UIN Raden Fatah Palembang. Rather than reiterating normative discourses, this research situates scientific integration as a paradigm that is constructed, interpreted, and operationalized differently within specific institutional and regional contexts. The novelty of this study lies in its analytical focus on epistemological starting points, interpretive practices among academic actors, and modes of institutional operationalization between multiple universities within a shared regional setting.

Accordingly, this study aims to analyze the paradigms of scientific integration in State Islamic Universities comparatively and contextually by examining variations in epistemological understandings of the relationship between the Islamic and general sciences. It further seeks to investigate the formative origins of these paradigms and

how they are operationalized across institutional dimensions, particularly in curriculum development, research implementation, and community service. Through this approach, the study is expected to contribute theoretically to strengthening epistemological frameworks for scientific integration, while offering practical insights for the development of Islamic higher education that is responsive to local realities and global challenges.

B. Method

This study employs a quasi-qualitative research approach to comparatively examine the paradigm of scientific integration across three State Islamic Universities (UIN) in Sumatra: UIN North Sumatra, UIN Ar-Raniry Banda Aceh, and UIN Raden Fatah Palembang. The quasi-qualitative approach differs from purely qualitative designs in its analytical logic and researcher positioning, as the inquiry is not entirely exploratory but is guided from the outset by an established conceptual framework of scientific integration (Siedlecki, 2020). While empirical data remain the primary source of analysis, the study applies a limited combination of inductive and deductive reasoning, allowing theoretical concepts to inform interpretation without predetermining findings (Fife & Gossner, 2024). In this context, the researcher assumes the role of a reflective analyst who acknowledges subjectivity while maintaining methodological control throughout the research process.

The three UINs were purposively selected because they represent distinct institutional and socio-cultural contexts in the development of scientific integration in Sumatra, thereby enabling a meaningful comparative analysis. UIN North Sumatra reflects an urban and multicultural academic environment with a strong tradition in Islamic scholarship; UIN Ar-Raniry represents a historically and normatively rooted Islamic context shaped by Aceh's religious heritage; and UIN Raden Fatah illustrates a more adaptive and functional approach to scientific integration within Southern Sumatra. These contextual differences provide a robust basis for examining variations in epistemological orientations and institutional operationalization.

Research informants included university leaders, lecturers, and students who were directly involved in the formulation, interpretation, and implementation of scientific integration paradigms at each institution. Informants were selected purposively based on their institutional roles, academic relevance, and cross-disciplinary representation. Data collection was conducted proportionally across sites and was concluded once thematic saturation had been achieved.

Data were collected through non-participatory observation, in-depth interviews, documentation analysis, and Focus Group Discussions (FGDs). The observation focused on academic practices and campus culture related to scientific integration. In-depth interviews were conducted using semi-structured guidelines, audio-recorded, and transcribed verbatim to ensure data integrity and analytical accuracy (Serrone et al., 2023). Documentation analysis examined institutional texts such as vision–mission statements, strategic plans, and curriculum documents to identify formal expressions of integration policy. FGDs were conducted to deepen interpretation and validate emerging findings through cross-disciplinary dialogue among academic actors.

Data analysis followed the Miles and Huberman interactive model, comprising three stages (Salmona & Kaczynski, 2024). First, data reduction was performed through systematic coding and thematic categorization of interview transcripts, observational notes, documents, and FGD records, whereby irrelevant data were excluded. Second, data were displayed through analytical narratives and comparative tables to identify patterns, similarities, and differences across the three UINs. Third, conclusions were drawn and verified through pattern interpretation and triangulation of data sources, methods, and institutional contexts. Throughout the analysis, the theoretical framework of scientific integration guided coding, comparison, and interpretation, particularly along epistemological and institutional dimensions.

All research procedures were conducted in accordance with established ethical standards. Formal permission was obtained from the authorities at each UIN prior to data collection, and informed consent was secured from all participants. Informant anonymity and the confidentiality of data were strictly maintained, and participation was voluntary and free from coercion.

C. Results and Discussion

This section presents the research findings and their analysis in the context of scientific integration at three UINs in Sumatra: UIN North Sumatra, UIN Ar-Raniry, and UIN Raden Fatah. The results are presented through three main themes. The first theme explores the specific forms of the scientific integration paradigm adopted by each UIN. The second theme describes the variations in these paradigms across the three institutions. The third theme traces the application of these paradigms in academic practice, including teaching, research, and community service, thereby demonstrating the extent to which integrative theory is translated into real action.

1. Results

a. The form of the paradigm of scientific integration at UIN North Sumatra, Ar-Raniry and Raden Fatah

UIN North Sumatra, Ar-Raniry and Raden Fatah developed paradigms of scientific integration distinctly, reflecting the influence of each institution's specific context. UIN North Sumatra carries the paradigm *of Wahdatul 'Ulum*, which is oriented towards the unity of all sciences while linking them with spiritual and social values. The integration of knowledge at UIN North Sumatra takes place across five dimensions, namely, Particular, Horizontal, Actuality, Ethics, and Interpersonal which facilitates the dialogue between the Islamic sciences, social sciences, and modern sciences. Each dimension illustrates how the integration of science is practiced systematically: Particular integration shows the relationship between science and divinity; Horizontal integration unites Islamic disciplines with social and modern science; Actuality integration adapts science to the needs of society; Ethical integration emphasizes moral values and moderation in scientific practice; and Interpersonal integration addresses the relationship between the spiritual and intellectual aspects of human beings in the process of learning and knowledge transfer.

To clarify the framework of scientific integration, it is presented in the form of the following image:

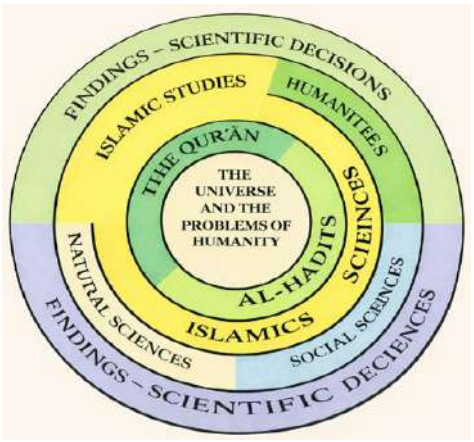

Figure 1. Model of scientific integration at UIN North Sumatra

This image describes a framework for scientific integration that focuses on the relationship between the main sources of Islamic knowledge and various contemporary disciplines. At the center of this model is "The Universe and the Problems of Humanity,"

indicating that all scientific efforts are directed toward understanding the universe and solving humanity's problems. Surrounding this core are two main sources of knowledge in Islam: the Qur'an and the Hadith, which form the epistemological and normative foundation for the development of knowledge.

One of the leaders at UIN North Sumatra stated:

> *The position of revelation in the scientific construction of the campus is not solely placed as a source of law or moral teachings, but as a grand theory that becomes the foundation for the entire development of science. Revelation is the center of our orientation. (Interview with TA, April 2024).*

On the other hand, UIN Ar-Raniry implements scientific integration through a scientific paradigm called "fricativization." The term is derived from the word "fricative," which refers to a sound produced by forcing air through a narrow constriction in the vocal tract. In essence, fricatives emphasize the production of sound through the expulsion of air prior to the articulation of a particular phoneme, similar to the breath one uses when extinguishing a candle. The fricativization of science can be understood as the breath that animates knowledge, enabling it to manifest in human life. A new scientific movement emerges once it acquires this "air", which metaphorically represents the spirit blown into the "container" of being. Knowledge, in this context, is not merely information, but a life force that empowers rather than stifles. Analogous to the soul or life, the paradigm of fricativization of science is the spirit breathed into the human body to bring it to life. At this stage, the objects of science have not yet moved or have not received their motion: the exhalation can produce two effects, turning life on or off.

The fricativization paradigm occupies the highest position in the mastery of science, attained after a scientist masters the five preceeding scientific stages. First, the Descriptive stage, where an individual is able to describe or narrate knowledge without conducting in-depth critical analysis. Second, the Explanatory stage, characterized by the ability to explain an idea thoroughly from various perspectives, sometimes based on the same theory of knowledge. Third, the Discursive stage, where thinkers begin to associate the results of their reasoning with the scientific discourse of others. Fourth, the Interpretive stage, in which a person is able to build an original scientific foundation to formulate theories or reach the level of scientific theorization. Fifth, the Implicit stage, where the thinker understands the potential impact of their thoughts on others and society at large.

This view arises from the institutional awareness that the primary challenge for scientific development in Islamic universities is the dichotomous tendency in understanding the relationship between Islamic science and modern science. One of the leaders of UIN Ar-Raniry explained:

> *We don't want a dichotomy between Islamic sciences and modern sciences. Therefore, this paradigm is designed to ensure that the development of science remains rooted in the values of revelation while remaining open to scientific rationality and contemporary social needs. (Interview with RM, April 2024)*

Meanwhile, the concept of science integration at UIN Raden Fatah is known as "Construction of Holistic-Integrative Science," which is symbolized by the "House of Knowledge" icon. The development of knowledge at UIN Raden Fatah is approached through the aspect of epistemology (methodological paradigms and methods). In terms of the techniques for exploring, researching, and developing knowledge, UIN Raden Fatah reconstructs epistemology by simultaneously and holistically integrating four methods: textual interpretation (*bayani*), the empirical-scientific observation (*Tajribi*), rational-philosophical logic (*Burhani*), and intuition (*'Irfani*). This approach is termed holistic-integrative epistemology. It is used to develop knowledge and formulate new theories across all objects of scientific study: both the Qur'anic verses (*Ayat Qur'aniyah)* and the cosmic verses (*Kauniyah)*, the universe and humanity.

The explanation above demonstrates that every discipline is a window that remains open to being developed, expanded, or critiqued. Through this process, a complete and comprehensive theory of knowledge is born, one that is in harmony with holistic principles and consistent with the nature of human life (Ye, 2024). Although the names of the disciplines remain Psychology, Economics, Sociology, and the like, the scientific essence and the theories forming the body of knowledge are expected to be integrated, consistent, and holistic. This reflects Islamic values that are in harmony with fitrah, without requiring the formal label of "Islamic."

The paradigm described above represents a substantive effort to build a consistent and meaningful scientific framework for reflecting on the basic assumptions, theoretical orientation, and value implications of the science being taught. One of the leaders at UIN Raden Fatah stated:

> *For us, scientific integration means building a complete perspective on the disciplines we teach. The purpose of scientific integration is not to replace Psychology into 'Islamic*

Psychology' or Economics into 'Islamic Economics' symbolically, but to ensure that the theory, approach, and analytical framework used do not contradict the basic values of Islam and human nature (Interview with MM, May 2024).

b. Differences in the characteristics of scientific integration at UIN North Sumatra, Ar-Raniry and Raden Fatah

Comparatively, the starting point of the scientific paradigm at each UIN reveals distinct characteristics and conceptual approaches. UIN North Sumatra employs an anatomical deduction model through scientific thinking that moves from philosophical to technical-methodological aspects. Meanwhile, UIN Ar-Raniry bases its construction and interpretation on the metaphor of the spirit, where the integration of knowledge is understood as the process of infusing monotheism into every stage of science. On the other hand, UIN Raden Fatah originates from the principle *of* monotheism as the foundation of its paradigm, viewing all knowledge as belonging to Allah and existing as a unified whole, which is then applied through the "House of Knowledge" metaphor using integrated study methods. The following table details the comparison of the three UINs across various conceptual aspects:

Table 1. Conceptual comparison of science integration

No.	UIN North Sumatra	UIN Ar-Raniry	UIN Raden Fatah
1.	Deduction Starting Point: Anatomical deduction from scientific paradigms through the concept of scientific thought	Deduction Starting Point: The analogy of the spirit; an essential psychological identity as a driver of knowledge	Deduction Starting Point: The teachings of monotheism as the basis of the scientific paradigm
2.	Philosophical Focus: Moving from the philosophical aspect to the technical-methodological aspect	Philosophical Focus: knowledge integration through the cultivation of *tawhid* at every level of knowledge	Philosophical Focus: *Tawhid* as the main substance; all knowledge belongs to and originates from Allah
3.	Knowledge Integration Approach: Starting with scientific, human, and natural problems, then moving through philosophy, paradigm, methodology to implementation	Knowledge Integration Approach: The integration of science as a process of "blowing" monotheism into the entire scientific process, from remembering to creating	Knowledge Integration Approach: Knowledge is viewed as an interconnected whole. The divisions *of 'ulūm ad-dīniyah*, *'ulūm al-insāniyah*, and *'ulūm al-kauniyah* are understood as details of the knowledge of Allah.
4.	Operational: Connecting philosophy, methodology,	Operational: Uniting the physical, psychological, and	Operational: Ensuring that science is integrative,

No.	UIN North Sumatra	UIN Ar-Raniry	UIN Raden Fatah
	and implementation so that science functions in study, development, and service	purposeful dimensions of human life so that each stage of knowledge harmonizes with monotheistic values	holistic, and in harmony with divine values; supporting cross-disciplinary scientific development

The table shows that each UIN has a different starting point. UIN North Sumatra constructs an anatomical deduction based on its scientific paradigm through the concept of scientific thinking, explaining the *Wahdatul 'Ulum* model as it spans from philosophical to technical-methodological aspects. Operationally, this concept departs from scientific, human, and natural problems; the *Wahdatul 'Ulum* paradigm then progresses through philosophy, paradigm, and methodology, to implementation, fulfilling its function in the study, development, and service of knowledge. From here, the concept is translated into the curricular framework and applied in lectures, research, and community service (FGD Results, April 2024).

UIN Ar-Raniry derives the constructions and interpretation of its scientific paradigm from the metaphor of the spirit. The essential psychological identity at its center is understood as the driving force that animates the entire body of knowledge. The spirit also unites the various physical and psychological elements of humanity and their purpose in life. Based on the concept of the spirit entering the human being through *nafakh* (divine breath), the integration of knowledge is understood as the process of infusing monotheism (*tawhid*) into every stage of the scientific process (FGD Results, April 2024).

Meanwhile, UIN Raden Fatah derives its paradigmatic framework from the teachings of monotheism as the basis of the scientific paradigm. From the perspective of scientific monotheism, all knowledge belongs to Allah and originates from Him. Therefore, everything that proceeds from Allah, both in the form of revelation (*Kalam*) and creation, is viewed as an objective reality that serves as an object of knowledge. From this perspective, science is essentially one in substance. In the epistemological aspect, to ensure that the development of science is integrative, disciplines are studied using four integrated methods: textual interpretation (*bayaniy*), empirical-scientific observation (*tajribiy*), rational-philosophical logic (*burhani*), and intuition (*'irfaniy*) (FGD Results, May 2024).

c. Implementation of Scientific Integration at UIN North Sumatra, Ar-Raniry, and Raden Fatah

The implementation of scientific integration at UIN North Sumatra Ar-Raniry, and Raden Fatah is carried out through educational and teaching activities that combine religious courses with the general sciences, or by infusing religious principles into general courses and vice versa. At UIN North Sumatra, for example, the *Wahdatul Ulum* Center was established via Rector's decree No. 601 of 2020. Based on this Decree, the Center is under the direct supervision of the Rector and the Vice Rector for Academic and Institutional Affairs, and is responsible for formulating the scope of work and programs for *Wahdatul Ulum*. At the direction of the Rector, the Center plans two primary programs: first, the integration of Islamic studies with the general sciences in education and teaching; and second, the conduct of research based on *the Wahdatul Ulum* paradigm.

Based on this program directions, the *Wahdatul Ulum* Center formulated three areas of work: first, the refinement of the *Wahdatul Ulum* concept; second, the field of curriculum and learning; and third, the field of socialization and publication. Regarding curriculum, UIN North Sumatra issued the University Course Curriculum Document Referring to KKNI-SNPT and the *Wahdatul Ulum* Paradigm via Rector's Decree No. 346 of 2022.

Table 2. Distribution of university courses at the S1 (Undergraduate) level

No.	Course Title (Indonesian/English)	Course Code
1.	Pancasila (State Ideology)	001
2.	Kewarganegaraan (Civics)	002
3.	Qur'an	003
4.	Hadis (Prophetic Traditions)	004
5.	Ilmu Tauhid (Theology/Monotheism)	005
6.	Wahdatul Ulum (Unity of Sciences)	006
7.	Sejarah Peradaban Islam (SPI) (History of Islamic Civilization)	007
8.	Fikih/Usul Fikih (Islamic Jurisprudence/ Principles of Jurisprudence	008
9.	Etika Akademik (Academic Ethics)	009
10.	Filsafat Ilmu (Philosophy of Science)	010
11.	Bahasa Arab (Arabic Language)	011
12.	Bahasa Inggris (English Language)	012
13.	Bahasa Indonesia (Indonesian Language)	013

The table above illustrates that efforts to combine religious courses with the general sciences are implemented through a cross-disciplinary distribution of university

courses, ensuring that students from various study programs acquire a foundation in Islamic knowledge alongside general scientific perspectives that are mutually integrated.

In the field of research, *the Wahdatul Ulum* paradigm is directed toward the advancement of knowledge and technology, with "innovation" as the central keyword. Through innovations in science and technology, the university aims to create an economic, social and cultural environment that enhances its institutional reputation. As stipulated in the Strategic Plan of UIN North Sumatra for 2020-2024 (Rector's Decree No. 220 of 2020), the research strategies derived from *Wahdatul Ulum* are: first, an integrative transdisciplinary approach, which utilizes perspectives beyond a single field of specialization by involving experts from other disciplines; and second, a collaborative transdisciplinary approach, which gathers academics willing to contribute their diverse knowledge and skills to shared projects.

A lecturer at UIN North Sumatra stated:

> *The institutional support is quite strong. The campus regularly organizes seminars, workshops, and scientific forums that specifically discuss the theme of scientific integration. In my opinion, these activities are examples of integrated knowledge practices that can be applied in research and learning (Interview with KA, April 2024).*

As stipulated in the aforementioned document, the application of *Wahdatul Ulum* in Community Service encompasses three dimensions: first, service as a means to generate knowledge through interaction with the community; second, service as a learning process for academics and students through real-world experiences in society; third, service as an the application of knowledge to advance society and address community challenges.

Meanwhile, at UIN Ar-Raniry, scientific integration is also evident in the curriculum structure. For example, in non-religious faculties, particularly the Faculty of Technology and Information, the distribution of religious and general courses reveals a relatively balanced composition.

Table 3. Distribution of S1(Undergraduate) courses at UIN Ar-Raniry

No.	Course Title (Indonesian/ English)	Course Code
1.	Ulumul Quran (Quranic Sciences)	2012TI001
2.	Ulumul Hadits (Hadith Sciences)	2012TI002
3.	Bahasa Arab (Arabic Language)	2012TI003
4.	Bahasa Inggris (English Language)	2012TI004
5.	Pancasila dan Kewarganegaraan (State Ideology and Civics)	2012TI005

No.	Course Title (Indonesian/ English)	Course Code
6.	Matematika Dasar (Basic Mathematics)	2012TI006
7.	Pengantar Saintek Islam (Introduction to Islamic Science and Tech)	2022TI007
8.	Pengantar Teknologi Informasi (Introduction to Information Technology)	2032TI008
9.	Skill Digital (Digital Skills)	2032TI055

In addition, a strategy to strengthen scientific integration is developed through a co-curricular program, specifically the *Ma'had Jami'ah*. As explained in the 2022-2023 academic guidance document (Rector's Decree No. 44 of 2023), *Ma'had Jami'ah* is a program designed to strengthen language skills, Qur'anic literacy, and *Akhlaq al-Karimah* (noble character), ensuring that UIN Ar-Raniry graduates embody the characteristics of Islamic scholars.

Ma'had Jami'ah is directed toward the strengthening of faith and noble morals, serving as a center for the development of Islamic Science and a foundation for the creation of an intelligent, dynamic, creative, peaceful and prosperous Muslim society through a *pesantren*-based dormitory management system. Participation in *Ma'had Jami'ah* is mandatory for all UIN Ar-Raniry students, who must successfully graduate from the program. The curriculum at *Ma'had Jami'ah* includes *Tahsin* and *Tahfidz* of the Qur'an, *Fiqh Ibadah*, and *Tsaqafah Islamiyah,* among other subjects.

One of the students at UIN Ar-Raniry stated:

> *I realized that the ability to read and memorize the Qur'an is a personal necessity throughout my life. This religious grounding has helped shape the way I behave and interact with my surroundings, both on and off campus. For me, the religious strengthening provided by the campus guides my academic journey as well as my daily life as a student. (Interview II, April 2024)*

The implementation of UIN Ar-Raniry's scientific integration emphasizes contemporary, innovative, and compatible approaches, encompasses both product and process innovation. This focus extends beyond standard research activities to the discovery of innovative solutions for problems ranging from theoretical development to engineering. As stated in the UIN Ar-Raniry Strategic Plan 2020-2024, the university aims to advance the practical application of new scientific values and contexts, developing novel models for applying science and technology to accelerate the growth of a modern, religious society. Additionally, a core mission of the Strategic Plan is to conduct research grounded in religious moderation and harmony to address local, national and international challenges.

On the other hand, in accordance with Rector's Decree No. 2216 of 2021 regarding curriculum development, UIN Raden Fatah has implemented systematic scientific integration throughout its programs. The substance of this integration is not merely presented as a separate course; rather, it is internalized as an integral part of the learning materials within the natural and applied sciences, including engineering and technology.

Table 4. Distribution of S1(Undergraduate) courses at UIN Raden Fatah

No.	Courses	Course Code
1.	Pancasila (State Ideology)	UIN 1022
2.	Bahasa Indonesia (Indonesian Language)	UIN 1042
3.	Kewarganegaraan (Civics)	UIN 2032
4.	Studi Keislaman (Islamic Studies)	UIN 1013
5.	Bahasa Arab (Arabic Language)	UIN 1052
6.	Bahasa Inggris (English Language)	UIN 1062
7.	Islam dan Ilmu Pengetahuan (Islam and Science)	UIN 3072
8.	Islam dan Peradaban Melayu (Islam and Malay Civilization)	UIN 5122
9.	KKN (Community Service Program)	UIN 5124

The list of courses reflects a university curriculum structure designed to integrate national values, Islamic principles, and the mastery of science. The instructional objectives (competencies) are formulated to integrate scientific and technological proficiency within the cognitive and psychomotor domains, alongside attitudinal and character-based competencies within the affective domain.

As established in the Strategic Plan Determination (Rector's Decree No.1637 of 2020), an integrative research scheme has been designed that requires the use of multiple epistemological approaches, applicable to both religious texts and the social sciences and humanities. Through this scheme, researchers are directed to holistically integrate textual analysis (*bayani*), rational-theoretical reasoning (*burhani*), and empirical observation and experimentation (*tajribi*). The research orientation is further strengthened toward applied research, ensuring that findings produces tangible practical impacts for societal development and the resolution of socio-religious challenges.

2. Discussion

This research demonstrates that UIN North Sumatra, UIN Ar-Raniry, and UIN Raden Fatah develop paradigms of scientific integration through diverse approaches

tailored to their respective institutional contexts. From a paradigmatic perspective, these differences lie primarily in the conceptual starting point and the patterns of scientific deduction employed. UIN North Sumatra utilizes a model of scientific deduction that moves from a philosophical framework to technical-methodological aspects; this is formally institutionalized through the *Wahdatul Ulum* paradigm and implemented through the development of transdisciplinary research and knowledge innovation.

UIN Ar-Raniry presents a different approach by positioning scientific integration as a process of internalizing religious values throughout the entire student academic experiences. This approach is evident in the balance between religious and scientific curricula, as well as the strengthening of character and religiosity through the mandatory *Ma'had Jami'ah* program, which serves as a foundation for forming an academic and social ethos.

Meanwhile, UIN Raden Fatah Palembang highlights distinctive curricular and epistemological approaches by internalizing the integration of science directly into learning materials and research schemes. This integration is operationalized through the combined use *of Bayani, Burhani,* and *Tajribi* approaches and is directed toward applied research oriented towards solving socio-religious problems.

The distinction between *Wahdatul Ulum*, the Fricativization of Knowledge, and the House of Knowledge is not merely a matter of terminology; rather, it reflects different epistemological orientations and institutional strategies in designing scientific integration, each having a direct impact on curriculum design, academic culture, research, and community service. In terms of curriculum design, *Wahdatul Ulum* establishes a systematic and structured curriculum, progressing from a philosophical to a technical-methodological framework (Anand et al., 2020; Suwendi et al., 2024; Abd Ghani et al., 2025). The curriculum is designed to ensure interdisciplinary dialogue via university courses and relatively formal conceptual integration (Schreiber & Cramer, 2022; Bayu Astra et al., 2024; Syam & Ishak, 2025; Muliati et al., 2025).

On the other hand, the Fricativization of Knowledge is more oriented toward the process of internalizing values, so that the curriculum functions not only as an academic structure but also as a medium for cultivating monotheism and the formation of students' spiritual consciousness (Seyyed Hossein Nasr, 2020; Abbas et al., 2025). The integration of knowledge here is more of an experience and habituation than a mere course arrangement (Johnson, 2021; Rozi et al., 2023; Arodha et al., 2025). The House of Knowledge interprets the curriculum as an open epistemological space, where various

disciplines are placed within a single knowledge structure that is interconnected through a holistic approach to *Bayani, Burhani, Tajribi, and 'Irfani* (Tabrani ZA., 2015; al Walid et al., 2024; Doll Kawaid et al., 2025).

In the context of academic culture, *Wahdatul Ulum* encourages a culture based on rationality, order, and cross-disciplinary collaboration within a strong institutional framework. The Fricativization of Knowledge builds an academic culture that emphasizes intellectual piety, where scientific activity is understood as part of a living spiritual and moral process. Meanwhile, the House of Knowledge develops a dialogical and reflective academic culture, which views disciplinary differences not as barriers, but as complementary windows that enrich scientific understanding (Chaparro-Banegas et al., 2024; Ilyas et al., 2023; Qadafy, & Yunita, 2025). In the realm of research, *Wahdatul Ulum* tends to be directed toward the development of transdisciplinary research and institutionalized knowledge innovation, with the aim of producing practical academic and technological contributions (Vencatsamy, 2024; Abdullah et al., 2025; Amalia et al., 2025).

The Fricativization of Knowledge interprets research as the process of giving "spirit" to science, so that the orientation is not only on the novelty of findings but also on the value, meaning, and ethical impact of the research itself. While the House of Knowledge positions research as a holistic effort to build theories and social solutions through a rigorous and balanced methodological integration of text, reasons, and empirical data (Anwar et al., 2023; Suwendi et al., 2024; Muthohirin et al., 2025).

As for community service, *Wahdatul Ulum* views it as a direct derivative of the integration of science, research, and innovation to solve social problems systemically. Fricativization emphasizes community service as a space for the actualization of monotheistic and moral values in social life; thus, the approach tends to be transformative and based on character building (Desy Utari et al., 2025; Hermawati et al., 2025). Meanwhile, the House of Knowledge sees community service as the application of holistic knowledge to respond to societal problems contextually by combining normative, rational, and empirical approaches.

The findings of this study expand and simultaneously correct the tendency of previous studies on scientific integration at UIN, which generally remain at normative and conceptual levels. While the concepts of integration–interconnection from M. Amin Abdullah, the Islamization of science by al-Faruqi, and the unity of knowledge according to al-Attas have been positioned as ideal epistemological visions (Abdullah, 2020; Al-Attas, 2023; Shehu, 2023; Mohamed, 2023), this study shows that such visions are not

translated singularly and uniformly into institutional practice. On the contrary, scientific integration develops as a paradigm that is contextually constructed, negotiated, and operationalized differently according to the institutional history, academic orientation, and development strategy of each UIN, an aspect that has rarely been critically addressed in previous research.

Wahdatul Ulum, which moves deductively from philosophy to methodology and is subsequently institutionalized through study centers and transdisciplinary research schemes, demonstrates that integration is understood as the engineering of a rational and managed knowledge system. This pattern aligns with the critique by Schmidt et al. regarding the need for a shift from theoretical adoption to structured epistemic dialogue, while simultaneously moving beyond the document-based policy studies that have previously dominated the field (Schmidt et al., 2024; Pairin et al., 2024; Umbar et al., 2025).

On the other hand, the Fricativization of Knowledge at UIN Ar-Raniry displays a different face of integration epistemically. Here, integration does not begin with the reconstruction of the scientific system, but with the internalization of monotheistic values as the "spirit" that animates the entire scientific process. This pattern shows that scientific integration does not always manifest as formal curriculum design or research methodology; it can also operate as an academic ethos and cultural practice (Ibnu Abbas et al., 2025; Hasanah et al., 2025). These findings complement and critique previous implementational studies, which tend to focus strictly on curriculum and research, by showing that strengthening student character and religiosity through *Ma'had Jami'ah* is an equally significant form of epistemological operationalization, even if it is less visible in formal policy frameworks (Lapsley & Chaloner, 2020).

Meanwhile, the House of Knowledge paradigm at UIN Raden Fatah represents the most epistemologically explicit model of integration. By internalizing the *Bayani, Burhani, Tajribi*, and *'Irfani* approaches directly into curriculum and research schemes, integration is positioned as the very way science operates, rather than just a vision or an added value (Schreiber & Cramer, 2022; Elena Lvovna, 2024). This model directly addresses Uytterhoeven's criticism of the tendency to reduce religious science to mere ethical legitimacy; in this paradigm, the texts of revelation, reason, and empirical data are placed in an equal and productive relationship to build theories and social solutions (Uytterhoeven, 2024; Herlambang & Parwanto, 2023).

Thus, the differences between *Wahdatul Ulum*, the Fricativization of Knowledge, and the House of Knowledge show that scientific integration is not monolithic, but manifests as a diverse spectrum of strategies: structural-institutional, cultural-spiritual, and epistemological-operational. The main novelty of this article lies in a comparative-contextual approach, which not only discusses the vision of scientific integration but empirically traces how these paradigms are constructed, negotiated, and operationalized within daily academic practices, spanning curriculum, academic culture, research, and community service. Ultimately, scientific integration is understood as a dynamic, living paradigm, rather than a mere epistemological slogan or administrative policy.

Theoretically, these findings enrich the discourse on scientific integration by demonstrating that a single, broad framework of "Islamic science" can yield a wide range of epistemologically valid operational models, depending on institutional context and academic orientation. In terms of policy, this research has implications implies the need for more reflective and contextual campus policy formulation, specifically by avoiding the standardization of scientific integration models and instead providing space for strategies aligned with the institutional character, academic resources, and social needs of each UIN.

In a global context, these findings offer Sumatra's experience as a representation of the Global South in constructing higher education scientific integration based on religious values, locality, and contemporary social needs. These integration models can be viewed as an alternative to Western university paradigms, which tend to be secular and fragmented, while enriching the global discourse on the plurality of knowledge integration models beyond Global North mainstreams.

However, this research has limitations that warrant acknowledgment. The scope of the study is limited to three UINs in Sumatra; therefore, it does not fully represent the diversity of scientific integration practices across all PTKIN in Indonesia. Furthermore, the reliance on interviews with leaders and lecturers may be subject to informant bias, while the analyzed policy documents may not fully capture practical dynamics occurring at the classroom and laboratory levels.

D. Conclusion

This study concludes that the paradigm of scientific integration in Islamic religious universities in Sumatra does not unfold according to a single or uniform model, but through diverse and context-dependent configurations. The findings

demonstrate that scientific integration operates as a layered epistemological process encompassing philosophical orientation, methodological alignment, and academic practices. Institutional vision, historical transformation, and social context emerge as decisive factors shaping how integration is constructed and enacted, confirming that scientific integration in Sumatra develops through differentiated and dynamic pathways rather than standardized institutional formulas.

This research contributes theoretically by reframing scientific integration from a predominantly normative or symbolic discourse into an epistemic framework that actively structures academic worldview, research orientation, and institutional praxis. By empirically revealing variations in how integration is conceptualized and operationalized, this study extends existing scholarship that often treats Islamic science as a singular epistemological ideal. Instead, it demonstrates that a shared Islamic epistemic foundation can generate multiple, equally valid operational paradigms, thereby contributing to global debates on the plurality of knowledge integration in higher education. Practically, the findings imply that Islamic universities should not be restricted to uniform models of scientific integration but should instead be encouraged to develop integrative strategies aligned with their institutional character, academic capacity, and societal needs. Such an approach allows integration to function as a sustainable academic paradigm rather than an administrative mandate.

Given the limited scope of this study to several universities in Sumatra and its reliance on document analysis and key-informant interviews, future research should expand cross-regional comparisons and employ longitudinal designs to examine the long-term sustainability of integration paradigms in teaching and research practices. Ultimately, this study affirms that scientific integration is not an institutional slogan, nor a fixed conceptual project, but rather a living epistemological process that must be continuously negotiated within academic practice. The strength of scientific integration lies not in standardization, but in its capacity to remain contextual, dialogical, and responsive to the evolving challenges of Islamic higher education at both national and global levels.

Declaration of Competing Interest

The authors declare that there is no conflict of interest regarding the publication of this article. The research was conducted independently, and no financial, institutional, or personal relationships influenced the research process, analysis, or interpretation of the findings.

Declaration of Generative AI

The authors declare that artificial intelligence (AI) tools were used in a limited manner to support language refinement, clarity of expression, and editorial consistency during the manuscript preparation process. The use of AI did not involve the generation of research data, analysis, interpretation of findings, or substantive scholarly arguments. All intellectual content, research design, data collection, analysis, and conclusions remain the full responsibility of the authors.

Bibliography

Abbas, S., Mukhlas, O. S., Neonbeni, R. V., Saebani, B. A., Judijanto, L., Saepullah, U., & Sistyawan, D. J. (2025). The Application of Kafā'ah and Weton in the Socio-Legal Development of Marriage Law in East Java. *Nurani: Jurnal Kajian syari'ah Dan Masyarakat*, *25*(2), 493-513. https://doi.org/10.19109/nurani.v25i2.28041

Abd Ghani, A. R., Huda, M., Sholihah, M., ZA, T., & Hussin, H. (2025). Tahfiz (Memorization Sciences) Curriculum Practice: An Empirical Study from Private School in Johor, Malaysia. *Nazhruna: Jurnal Pendidikan Islam*, *8*(1), 233–245. https://doi.org/10.31538/nzh.v8i1.265

Abdullah, M. A. (2020). The Intersubjective Type of Religiosity: Theoretical Framework and Methodological Construction for Developing Human Sciences in a Progressive Muslim Perspective. *Al-Jami'ah: Journal of Islamic Studies*, *58*(1), 63–102. https://doi.org/10.14421/ajis.2020.581.63-102

Abdullah, M.M., Mohd Arif, M.I.A., Abd Manaf, A.A., & Sabri, N.F. (2025). Integration of Absolute Assignment in the Takaful Industry and its Implications on Islamic Estate Planning. *Samarah: Jurnal Hukum Keluarga Dan Hukum Islam*, *9*(1), 495-522. https://doi.org/10.22373/sjhk.v9i1.26455

Al Walid, K., Miri, M., Rijal, S., Gama, C. B., & Norman, N. A. (2024). Irfānī Epistemology and Indonesian Islam from Jabiri's Fragmentation to Neo-Sadra's Integration: An Islamic Philosophical Approach. *Ulumuna*, *28*(2), 738–768. https://doi.org/10.20414/ujis.v28i2.912

Al-Attas, M. Naguib. (2023). *Islam: The Covenants Fulfilled*. Ta'dib International.

Amalia, E. R., Dwi Bhakti Indri M, Khoiriyati, S., Ummah, N., Oviani, M., Kusumawardhani, J., & Umayyah, U. (2025). Bridging Educational Reform and Faith: Evaluating Kurikulum Merdeka's Compatibility with Islamic Values in Madrasahs. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, *5*(4), 483–500. https://doi.org/10.31538/munaddhomah.v5i4.1413

Anand, G., Larson, E. C., & Mahoney, J. T. (2020). Thomas Kuhn on Paradigms. *Production and Operations Management*, *29*(7), 1650–1657. https://doi.org/10.1111/poms.13188

Andi Murniati. (2025). The Construction of Islamic Religious Education Curriculum Based on Desecularistic-Implementative Approach. *Progresiva: Jurnal Pemikiran Dan Pendidikan Islam*, *14*(01), 63–80. https://doi.org/10.22219/progresiva.v14i01.38200

Anwar, A., Yasin, A., Yusra, N., Mujtahid, I. M., & Hardila, D. (2023). TAWHID: As a Basis for Science Development. *Journal of Natural Science and Integration*, *6*(2), 196. https://doi.org/10.24014/jnsi.v6i2.21862

Arodha, D., Panorama, M., Moh. Syawaludin, & Musari, K. (2025). Can Muslim Communities Empower through Ethnic-based? A Case Study in Indonesia. *International Journal of Islamic Khazanah*, *15*(1), 36–47. https://doi.org/10.15575/ijik.v15i1.48990

Asnawi, N., & Zuhdi, M. (2025). Deconstructing Logocentrism and School-Centrism in Indonesia's Islamic Education: A Critical Epistemological Analysis. *Education Sciences*, *15*(12), 1615. https://doi.org/10.3390/educsci15121615

Bayu Astra, N. P., Hafid, E., & Suban, A. (2024). Scout Extracurricular Curriculum Management in Improving Student Discipline in Madrasah. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, *5*(2), 161–172. https://doi.org/10.31538/munaddhomah.v5i2.810

Carvalho, L., Almeida, D., Loures, A., Ferreira, P., & Rebola, F. (2024). Quality Education for All: A Fuzzy Set Analysis of Sustainable Development Goal Compliance. *Sustainability*, *16*(12), 5218. https://doi.org/10.3390/su16125218

Chaparro-Banegas, N., Mas-Tur, A., & Roig-Tierno, N. (2024). Challenging Critical Thinking in Education: New Paradigms of Artificial Intelligence. *Cogent Education*, *11*(1). https://doi.org/10.1080/2331186X.2024.2437899

Dairabi Kamil, Abdul Hamid Busthami Nur, & Yoki Irawan. (2025). Internationalisation of Islamic Higher Education in Indonesia and Malaysia: A Comparative Analysis of Rationales, Challenges, Strategies and Practices. *Journal of International Studies*, *21*(2), 148–176. https://doi.org/10.32890/jis2025.21.2.8

Desy Utari, Abidin, M., Yuniar Yuniar, & Junaidah Junaidah. (2025). Integration of General Knowledge and Religion Policy for the Emergence of Integrated Islamic Schools. *International Journal of Education and Literature*, *4*(1), 267–278. https://doi.org/10.55606/ijel.v4i1.217

Doll Kawaid, A. I. S., Yabi, S., Syed Hassan, S. N., Mujab, M., & Kahar, S. (2025). Integration of Knowledge: Comparison of Experiences in Malaysian and Indonesian Universities. *MIQOT: Jurnal Ilmu-Ilmu Keislaman*, *49*(2), 269. https://doi.org/10.30821/miqot.v49i2.1254

Elena Lvovna, S. . (2024). Japanese Philosophy as the Result of History of the National Spiritual Tradition. *Ascarya: Journal of Islamic Science, Culture, and Social Studies*, *4*(1), 103-111. https://doi.org/10.53754/iscs.v4i1.672

Fife, S. T., & Gossner, J. D. (2024). Deductive Qualitative Analysis: Evaluating, Expanding, and Refining Theory. *International Journal of Qualitative Methods*, *23*. https://doi.org/10.1177/16094069241244856

H. H., & Hayden, W. (2024). The Epistemology of Ta'dib in Islamic Civilizational Discourse: Reviving and Reconstructing Contemporary Muslim Scholars' Views. *Journal of Al-Tamaddun*, *19*(1), 181–197. https://doi.org/10.22452/JAT.vol19no1.14

Habibi, H. (2024). Revitalization of the Islamic Education Paradigm: An Islamic Epistemological Perspective. *Bestari*, *21*(2), 102. https://doi.org/10.36667/bestari.v21i2.1532

Haryanto, S., Sukawi, S., & Muslih, M. (2025). Uniting Tradition and Modernity: Scientific Paradigms of Pesantren-Based Universities. *Nazhruna: Jurnal Pendidikan Islam*, *7*(3), 684–704. https://doi.org/10.31538/nzh.v7i3.48

Hasanah, S. M., Inayati, I. N., Ismail, A. B., Ulum, M. S., Kawakip, A. N., Marno, M., Hidayatullah, A. D., & Fauziyah, U. (2025). The Integration of Islamic Family Law into Muslim Community Education in Japan: Socio-Cultural Dynamics in a Minority Context. *Nurani: Jurnal Kajian syari'ah Dan Masyarakat*, *25*(2), 578-598. https://doi.org/10.19109/nurani.v25i2.31145

Herlambang, S., & Parwanto, W. (2023). Paradigm Shifts in the Interpretation of Heaven Illustration Among Indonesian Mufassir: A Comparative Analysis of As-Singkili, Hamka, and M. Quraish. *Jurnal Studi Ilmu-Ilmu Al-Qur'an Dan Hadis, 24*(1), 181-204. https://doi.org/10.14421/qh.v24i1.4454

Hermawati, R. ., Praja, D. W. ., & Umam, K. . (2025). A Cross-Sectional Study of the Relationship Between BMI and Menstrual Cycle Regularity in Women of Reproductive Age in Pamekasan. *Ascarya: Journal of Islamic Science, Culture, and Social Studies*, *5*(1), 129-141. https://doi.org/10.53754/4jtssc51

Ilyas, I., Rani, F.A., Bahri, S., & Sufyan, S. (2023). The Accommodation of Customary Law to Islamic Law: Distribution of Inheritance in Aceh from a Pluralism Perspectives. *Samarah: Jurnal Hukum Keluarga Dan Hukum Islam*, *7*(2), 897-919. https://doi.org/10.22373/sjhk.v7i2.15650

Jaffary Awang, M. A. F. N. (2020). Islamic Educational Thought in Indonesia: Study of Azyumardi Azra's Thought. *Islamiyyat*, *42*(2), 61–70. https://doi.org/10.17576/islamiyyat-2020-4202-06

Johnson, E. L. (2021). A Doxological Necessity: The Use of Biblical, Philosophical, and Empirical Knowledge to Construct a Comprehensive Christian Psychological and Therapeutic Science. *Journal of Psychology and Theology*, *49*(3), 235–256. https://doi.org/10.1177/0091647121995840

Lapsley, D., & Chaloner, D. (2020). Post-truth and Science Identity: A Virtue-Based Approach to Science Education. *Educational Psychologist*, *55*(3), 132–143. https://doi.org/10.1080/00461520.2020.1778480

Mohamed, M. M. A. (2023). Islamism and Jihad: The Problem With Western Taxonomies. *Ulumuna*, *27*(2), 715–734. https://doi.org/10.20414/ujis.v27i2.741

Muliati, M., Hannani, H., Ilham, M., Anwar, K., Al Jadi, S. (2025). Dialectics of Theology and Ecology in Ammatoa ri Kajang in Bulukumba, Indonesia: Paradigm of Tawhidic and Environmental Fiqh in Sulapa Appa. *Samarah: Jurnal Hukum Keluarga Dan Hukum Islam*, *9*(1), 374-393. https://doi.org/10.22373/sjhk.v9i1.28242

Muthohirin, N., Aziz, A. A., Mahfud, C., Mukhlis, F., & Hikmawati, R. (2025). Islamic Sciences in Transition: Post-Reformation Developments in Indonesia's State Islamic Universities. *Ulumuna*, *29*(1), 429–460. https://doi.org/10.20414/ujis.v29i1.849

Nor, A., Yusuf, M., & Arabi, I. (2024). Strategies for Improving the Professionalism of Islamic Education Teachers at University. *Tafkir: Interdisciplinary Journal of Islamic Education*, *5*(1), 40–61. https://doi.org/10.31538/tijie.v5i1.774

Okolie, U. C., Igwe, P. A., Nwosu, H. E., Eneje, B. C., & Mlanga, S. (2020). Enhancing Graduate Employability: Why do Higher Education Institutions Have Problems with Teaching Generic Skills? *Policy Futures in Education*, *18*(2), 294–313. https://doi.org/10.1177/1478210319864824

Pairin, P., Syahrul, S., Badarwan, B., & Samrin, S. (2024). The Integration of the Islamic and Customary Law in Tolaki Society, Southeast Sulawesi: Islamic History and Education Perspectives. *Samarah: Jurnal Hukum Keluarga Dan Hukum Islam, 8*(3), 1669-1690. https://doi.org/10.22373/sjhk.v8i3.24055

Qadafy, M. Z., & Yunita, Y. (2025). Just a Philomath, not a Polymath: Did the Paradigm of Integration-Interconnection of Sciences Obscure or Illuminate the Study of the Qur'an and Tafsir in Academic Institution?. *Jurnal Studi Ilmu-Ilmu Al-Qur'an Dan Hadis, 26*(1), 53-76. https://doi.org/10.14421/qh.v26i1.5790

Ramli, R., Razali, R., Gadeng, A. N., Diana, N., & Hariadi, J. (2025). Integrating Local Knowledge into Higher Education: A Qualitative Study of Curriculum Innovation in Aceh, Indonesia. *Education Sciences*, *15*(9), 1214. https://doi.org/10.3390/educsci15091214

Roqib, Moh., & As Sabiq, A. H. (2022). The Prophetic Education Paradigm as the Scientific Integration of UIN Saifuddin Zuhri in Merdeka Belajar Policy. *Al-Ta Lim Journal*, *29*(1), 1–14. https://doi.org/10.15548/jt.v29i1.716

Rozi, B., Pujiono, P., & Maskud, M. (2023). Islamic Boarding Schools and Universities' Curriculum Management Based on Spiritual and Intellectual

Mentality. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, *4*(2), 187–196. https://doi.org/10.31538/munaddhomah.v4i2.329

Salmona, M., & Kaczynski, D. (2024). Qualitative Data Analysis Strategies. In *How to Conduct Qualitative Research in Finance* (pp. 80–96). Edward Elgar Publishing. https://doi.org/10.4337/9781803927008.00012

Schmidt, M., Earnshaw, Y., Jahnke, I., & Tawfik, A. A. (2024). Correction: Entangled Eclecticism: A Sociotechnical-Pedagogical Systems Theory Approach to Learning Experience Design. *Educational Technology Research and Development*, *72*(6), 3495–3495. https://doi.org/10.1007/s11423-024-10387-5

Schreiber, F., & Cramer, C. (2022). Towards a Conceptual Systematic Review: Proposing a Methodological Framework. *Educational Review*, 1–22. https://doi.org/10.1080/00131911.2022.2116561

Serrone, G. Del, Cantisani, G., & Peluso, P. (2023). Speed Data Collection Methods: A Review. *Transportation Research Procedia*, *69*, 512–519. https://doi.org/10.1016/j.trpro.2023.02.202

Seyyed Hossein Nasr. (2020). *History of Islamic Philosophy* (S. H. Nasr & O. Leaman, Eds.). Routledge. https://doi.org/10.4324/9781003070733

Shehu, F. (2023). Investigating Ismāʿīl Rājī al-Fārūqī's Methodology in the Study of Christianity through Selected Textual Analysis from his Christian Ethics. *Intellectual Discourse*, *31*(1). https://doi.org/10.31436/id.v31i1.1913

Siedlecki, S. L. (2020). Quasi-Experimental Research Designs. *Clinical Nurse Specialist*, *34*(5), 198–202. https://doi.org/10.1097/NUR.0000000000000540

Sirojuddin, A., Maskuri, M., & Ghoni, J. (2025). Integration of Higher Education Curriculum with Islamic Boarding Schools in the Perspective of Multicultural Islamic Education. *Nazhruna: Jurnal Pendidikan Islam*, *8*(2), 265–281. https://doi.org/10.31538/nzh.v8i2.163

Suwendi, S., Mesraini, M., Azka, F. L., & Gama, C. B. (2024). Implementation of Knowledge Integration in Islamic Higher Education. *Jurnal Pendidikan Islam*, *10*(1), 41–52. https://doi.org/10.15575/jpi.v10i1.35385

Syam, A. S. M., & Ishak, I. (2025). Bridging Policy and Practice: Evaluating the Curriculum Effectiveness in Fostering Religious Moderation and 21st-Century Competencies. *Jurnal Pendidikan Islam*, *11*(2), 403–414. https://doi.org/10.15575/jpi.v11i2.49596

Tabrani ZA. (2015). *Persuit Epistemology of Islamic Studies*. Penerbit Ombak.

Umbar, K., Azkiyah, S. N., Maswani, M., Wahab, M. A., & Zulkifli, Z. (2025). A Systematic Review of AI-Powered Language Teaching Trends, Innovations,

and Challenges. *Ascarya: Journal of Islamic Science, Culture, and Social Studies*, *5*(2), 248–261. https://doi.org/10.53754/rth2mc61

Uytterhoeven, T. (2024). *Theology and Science on the Evolution of Religion, 16*. Springer International Publishing. https://doi.org/10.1007/978-3-031-67364-1

Vencatsamy, B. (2024). The world Religions Paradigm: Why Context Matters in Religious Studies. *Critical Research on Religion*, *12*(1), 12–25. https://doi.org/10.1177/20503032241226966

Ye (叶澜), L. (2024). Tracing the Origin and Creating the Future to Find the Lost Dimension of Nature in Modern Education: The Second Follow-up Study of *Life-Practice Educology*. *ECNU Review of Education*. https://doi.org/10.1177/20965311241227450