



Integration of Knowledge, Institutional Strengthening, and Academic Collaboration: An Institutional Visit Study at UIN Alauddin Makassar

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*Received: December 15, 2025, Revised: December 28, 2025, Accepted: December 31, 2025,
Published: February 2, 2026*

Abstract: This study aims to analyze the contribution of an academic visit conducted by the Scientific Consortium of UIN Sunan Gunung Djati Bandung to the strengthening of knowledge integration, institutional development, and academic collaboration at UIN Alauddin Makassar. Key concepts employed in this study include knowledge integration, higher education benchmarking, epistemic networking, and Islamic higher education governance. This research adopts a qualitative case study approach, utilizing field observations, focus group discussions, limited interviews, and institutional document analysis. The scope of the study covers the Faculty of Ushuluddin, the Institute for Research and Community Service (LP2M), and the Faculty of Medicine and Health Sciences (FKIK) at UIN Alauddin Makassar. The findings reveal that knowledge integration at UIN Alauddin Makassar has moved beyond conceptual formulation toward institutionalization, as reflected in integrative curricula, research governance, laboratory development, and value-based professional education. Academic visits function as an effective mechanism for institutional learning and epistemic reflection, fostering the consolidation of integrative paradigms and strategic institutional development within Islamic higher education. Key challenges include limitations in research infrastructure, disparities in human resource capacity, and the rigidity of national accreditation and professional standards. This study recommends strengthening inter-institutional research collaboration, developing sustainable benchmarking models, and deepening governance-based knowledge integration. This study contributes empirically to the literature on knowledge integration in Islamic higher education by demonstrating how integrative paradigms are operationalized through institutional policies, academic practices, and benchmarking-based collaboration.

Keywords: benchmarking; epistemic networks; Islamic higher education; knowledge integration; research collaboration.

Introduction

Strengthening the integration of knowledge in State Islamic Religious Universities (PTKIN) is a national strategic agenda that occupies a central position in the transformation of Islamic higher education in Indonesia. Since the change in institutional status from State Islamic Institute (IAIN) to State Islamic University (UIN) in the early 2000s, PTKIN has been directed to go beyond its traditional function as a center for the transmission of religious knowledge to become an integrative university that connects religious knowledge, science, social sciences, and technology within a coherent epistemological framework relevant to global challenges (Samsudin & Januri, 2018). This

transformation marks a paradigm shift from normative-doctrinal religious education to Islamic higher education that is dialogical, contextual, and oriented towards public welfare through creative interactions between revelation, reason, and empirical reality (Azra, 2020b).

In recent literature, knowledge integration in PTKIN is no longer understood merely as a curricular strategy, but rather as an epistemic foundation that influences research orientation, institutional governance, scientific publication development, and community service patterns. Knowledge integration requires alignment between the university's scientific vision, academic policies, research culture, and the scientific practices of lecturers and researchers (Boon et al., 2022). Therefore, the success of knowledge integration is largely determined by the institution's ability to translate epistemological ideas into measurable organizational structures, policy mechanisms, and performance indicators.

In this context, PTKIN in Indonesia has developed various models of scientific integration that reflect the epistemological character and direction of their respective institutional policies. UIN Sunan Gunung Djati Bandung, for example, has developed the "Wahyu Memandu Ilmu" paradigm from the outset as an epistemic framework that positions revelation as a value orientation and ethical source in the development of science, without negating the methodological autonomy of scientific and social disciplines (Darmalaksana, 2021). Recent developments indicate that this paradigm has undergone a conceptual evolution toward the "Rahmatan lil 'Alamin" approach, which emphasizes the orientation of scientific integration toward humanitarian values, justice, sustainability, and global well-being. In his presentation, Dadan Rusmana, Vice Rector 1 for the 2023-2027 period, emphasized that the evolution from Wahyu Memandu Ilmu (Guiding Revelation of Knowledge) towards Rahmatan lil 'Alamin (Blessing for the Universe) is not merely a change in terminology, but rather a deepening of the epistemological orientation of knowledge integration. The stages described include the formulation of an epistemic paradigm, strengthening the integrative foundations of interdisciplinary studies, and the formation of a scientific character oriented towards values and the common good. Knowledge integration is understood as a process that must be concretely visible in academic policies, curriculum design, and the perspectives of lecturers and researchers in producing knowledge. Thus, knowledge integration at UIN Bandung does not stop at the conceptual level, but is directed towards becoming a scientific ethos that shapes daily academic practice.

This approach is emphasized through the formulation of success indicators and Key Performance Indicators (KPIs) for the development of the Rahmatan lil 'Alamin (RLA) Consortium. The indicators developed include cross-faculty synergy in strengthening scientific integration, improving the quality of RLA-based research, strengthening scientific publications that represent UIN Bandung's scientific identity, developing an integrative curriculum, establishing thematic study centers, and increasing the capacity of lecturers and students to internalize contemporary Islamic scientific values. The existence of these indicators demonstrates that the consortium is positioned as a strategic instrument that works at both the epistemic and operational levels, with clear and measurable performance measures.

Meanwhile, UIN Alauddin Makassar has developed a scientific integration approach through an institutional policy framework oriented toward strengthening the integration of science and Islam within the context of religious moderation and the contribution of Islamic civilization. Unlike UIN Bandung, which explicitly formulates specific epistemic metaphors, UIN Alauddin Makassar's approach emphasizes integration as an institutional principle internalized through a long-term university development roadmap (UIN Alauddin Makassar, 2021). Scientific integration at UIN Alauddin is positioned as the foundation for transformation into a research and entrepreneurial university capable of generating impactful innovations for national and global development.

Literature shows that the success of science integration in PTKIN is largely determined by the alignment between epistemological vision and the institution's structural readiness. Azra (2020) emphasized that the main challenge for PTKIN lies not in the absence of integration concepts, but rather in the gap between policy documents and academic practices at the faculty and study program levels (Azra, 2020a). Findings by Hidayat (2022) reinforce this argument by demonstrating that the implementation of science integration is often hampered by limited human resources, weak interdisciplinary research governance, and a suboptimal incentive system for scientific publications based on science integration (Hidayat, 2022).

In the context of UIN Alauddin Makassar, scientific integration is explicitly made a pillar of long-term institutional development through the Guidelines for the Policy Direction of the UIN Alauddin Makassar Leadership from Time to Time. This document formulates a development roadmap until 2039, making the integration of science and Islam the common thread of institutional transformation. The roadmap was compiled through a best practices analysis approach, referring to world-leading universities such as Tsinghua University and King Saud University, which are considered successful in developing values-based research universities, strong institutional governance, and productive research ecosystems.

The development roadmap for UIN Alauddin Makassar is divided into five strategic stages aligned with the five-year strategic plan cycle, starting from strengthening internal capacity, improving the performance of Tri Dharma, strengthening comparative and competitive advantages at the regional and Asian levels, to achieving global recognition. Throughout these stages, knowledge integration is positioned as an epistemic foundation that guides curriculum development, research, publications, and institutional governance. This demonstrates that knowledge integration at UIN Alauddin is not merely understood as an academic discourse, but as a measurable and long-term institutional strategy.

Within the institutional architecture of PTKIN, the Institute for Research and Community Service (LP2M) plays a strategic role as a driving force for the integration of knowledge within the realm of research and community service. LP2M functions not only as an administrative unit managing research grants but also as a guardian of the university's epistemological direction. Ibrahim (2023) points out that LP2M's effectiveness in promoting knowledge integration depends heavily on the quality of research governance, interdisciplinary collaborative networks, and its ability to build an integrative scientific culture (Ibrahim, 2023). At UIN Alauddin Makassar, this role is strengthened through the development of strategic study centers, including the Center for Islamic Studies, Science, and Technology, which is aimed at bridging the dialogue between Islamic scholarship and science and technology (Marjuni, 2024).

In addition to the Institute for the Study of Islamic Law (LP2M), the Faculty of Ushuluddin (Islamic Theology) plays a crucial role in building the epistemological foundations of scientific integration. This faculty serves as a conceptual and methodological articulation space for Islamic sciences, serving as a basis for dialogue with other disciplines. However, there are challenges in linking the epistemological role of the Faculty of Ushuluddin with the development of applied research at LP2M and the implementation of scientific integration in professional faculties such as the Faculty of Medicine and Health Sciences. Professional faculties, however, are strategic venues for concretely operationalizing scientific integration through collaboration between applied science, Islamic ethics, and community-based research.

Various institutional initiatives at UIN Alauddin Makassar, such as workshops on the integration of Islam and science and technology, research-based discussion forums on religious moderation, and the development of integrative research guidelines, demonstrate a systematic effort to connect the epistemological and structural dimensions of science integration. However, empirical studies examining how these institutional units interact concretely in building a science integration ecosystem are still limited. Most research remains partial and fails to address the dynamics of epistemological relations and cross-unit governance.

The limitations of this study are increasingly apparent in the context of academic benchmarking between PTKIN (Islamic higher education institutions). Benchmarking is a strategic mechanism for transferring institutional knowledge, identifying good practices, and improving academic quality through institutional learning. However, studies on benchmarking in Islamic higher education are still relatively rare and generally focus on administrative aspects or accreditation (Sulaiman, 2021). Almost no research has identified benchmarking as an arena for epistemic exchange and a strategy for strengthening scientific integration between large PTKINs, such as UIN Sunan Gunung Djati Bandung and UIN Alauddin Makassar.

Based on this review, this research identifies three main gaps. First, there is a lack of empirical studies on the implementation of knowledge integration at the academic unit and institutional levels of PTKIN. Second, there is a lack of research that systematically examines the epistemological relationship between Islamic faculties, research institutions, and professional faculties within a single

institutional framework. Third, there is a lack of studies that position benchmarking between PTKIN as a strategy for strengthening knowledge integration and institutional learning.

This study aims to fill this gap by examining the benchmarking practices of the Scientific Consortium of UIN Sunan Gunung Djati Bandung to UIN Alauddin Makassar in three strategic units, namely the Faculty of Ushuluddin, LP2M, and the Faculty of Medicine and Health Sciences. The focus of the research is directed at analyzing the practice of scientific integration, the dynamics of epistemological interactions, and the contribution of institutional governance to strengthening scientific integration. Thus, this study is expected to not only provide an empirical description of benchmarking activities, but also offer conceptual contributions to the development of a model of scientific integration and institutional benchmarking relevant to PTKIN in Indonesia.

Method

This study uses a descriptive-qualitative approach to systematically describe the dynamics of scientific integration, institutional strengthening, and study-program development practices within the visited academic units. This approach was chosen because it allows for a contextual understanding of institutional phenomena through direct interactions with stakeholders and narrative empirical data (Creswell & Creswell, 2018). This research model is also relevant for examining epistemological processes and academic governance that cannot be explained through a purely quantitative approach (Flick, 2019).

Research location Campus 2 of UIN Alauddin in Gowa, South Sulawesi The study comprises three main units: the Faculty of Ushuluddin (Islamic Theology), the Institute for Research and Community Service (LP2M), and the Faculty of Medicine and Health Sciences (FKIK). These three were selected purposively because they represent three important pillars of the religious higher education system: Islamic epistemology, research governance, and professional science in the health sector. Purposive sampling is commonly used in qualitative research to ensure data depth and contextual relevance (Palinkas et al., 2015)

The research objects included institutional structures, academic programs, research policies, and scientific development strategies obtained during a series of institutional visits. The focus of observations was directed at aspects related to the implementation of science integration in the curriculum, research management, and epistemological interactions between stakeholders. Using this object-based focus allows researchers to capture institutional practices that are not always formally documented (Merriam & Tisdell, 2019)

Data collection techniques included participant observation, semi-structured interviews, and document analysis. Participant observation was used to directly understand institutional practices through researcher involvement in field visits, a technique commonly used to assess social and institutional dynamics (DeWalt & DeWalt, 2011). Semi-structured interviews were conducted to explore the experiences, views, and assessments of faculty leaders, study program heads, and LP2M administrators regarding strategies for science integration and institutional strengthening; this technique was deemed effective because it provided flexibility and a thematic focus (Kallio et al., 2016). Document analysis was used to examine academic guidelines, curricula, performance reports, and other official documents as sources of textual data that strengthened triangulation (Bowen, 2009).

Data analysis used the interactive model of Miles, Huberman, and Saldaña, which includes data reduction, data presentation, and simultaneous conclusion drawing (Miles et al., 2020). In the data reduction stage, information relevant to the research focus was selected and categorized. Data presentation was carried out through the preparation of a thematic matrix and narrative description to map the findings based on the unit of analysis. The conclusion drawing stage was carried out iteratively with verification using source and technique triangulation, a crucial procedure in ensuring the credibility of qualitative research (Guba & Lincoln, 1985)

To increase the validity of research results, triangulation was conducted by combining observational, interview, and document data. This type of triangulation is considered a key strategy for ensuring consistency and accuracy of interpretation in qualitative research (Fusch et al., 2018). Furthermore, the analysis process was conducted while maintaining an audit trail, a form of methodological transparency advocated by contemporary qualitative experts (Nowell et al., 2017).

Results and Discussion

Integration of Science in the Faculty of Ushuluddin

Observations of interactions between the Scientific Consortium of UIN Sunan Gunung Djati Bandung and the leadership of the Faculty of Ushuluddin (Islamic Theology) at UIN Alauddin Makassar indicate that scientific integration within the faculty has moved beyond conceptual formulation to epistemic institutionalization. Integration is no longer positioned as a normative discourse or merely a symbol of university policy, but has become a framework that guides academic decision-making, curriculum development, research direction, and the faculty's institutional design. In various formal meetings and academic dialogues, faculty leaders explicitly emphasized that scientific integration is an epistemological foundation that must be present in all academic activities, from the formulation of learning outcomes to the development of study programs. This finding aligns with the current trend in the development of PTKIN (Private Islamic Boarding Schools) which is entering a phase of epistemological consolidation, a phase in which the integrative paradigm has been translated into education sector policies and daily academic practices (Ma & Xie, 2023).

However, the results of focus group discussions indicate that this institutionalization process takes place within the context of complex structural dynamics and institutional challenges. Faculty leaders acknowledged that in recent years there has been a significant decline in the number of new students in several classical religion-based study programs, such as the Study of Religions, Sociology of Religion, and Islamic Aqidah and Philosophy. This decline not only impacts the quantitative stability of students but also raises strategic questions about the sustainability of study programs and the social relevance of Islamic theology amidst changing preferences of the younger generation. Conversely, study programs that directly address the practical needs of society and contemporary socio-political issues, such as International Relations and Library Science, have shown a trend of higher interest and have become a pillar of faculty stability. This fact indicates that the integration of knowledge cannot be separated from the dynamics of the higher education market and the demands for social relevance of knowledge (Al-Adwan & Al-Debei, 2024).

In an epistemological context, the Faculty of Ushuluddin (Islamic Theology) at UIN Alauddin Makassar appears to adopt an eclectic and moderate integration model. Integration is not understood in a singular sense, but rather is practiced through a combination of several complementary approaches. First, the integration-interconnection approach is evident in efforts to connect normative Islamic studies with social science and humanities methodology. Religion is understood not only as a doctrinal system but also as a social, historical, and cultural phenomenon that can be analyzed critically. This approach aligns with the development of Islamic higher education discourse that emphasizes critical dialogue between religious and empirical sciences as the epistemological foundation of modern Islamic universities (Fouz Mohamed Zacky & Moniruzzaman, 2024). Second, the normative-historical approach is evident in the way the faculty elaborates on classical Islamic literature to address contemporary issues, particularly in the study of Islamic interpretation, kalam, and philosophy. Third, the contemporary interpretation and science approach is used through the utilization of thematic methods, scientific hermeneutics, and analysis of kauniyah verses linked to environmental issues, biotechnology, and the development of modern science, a trend that has become increasingly prominent in integrative research in the last five years (Zubaidi et al., 2025).

These observational findings are reinforced by the results of focus group discussions (FGDs), which indicate that scientific integration at the Faculty of Ushuluddin (Islamic Theology) is practiced at several levels. At the curricular level, integration is realized through strengthening the social science approach in religious studies within faith-based study programs. The Study of Religions and Sociology of Religion, for example, adopt theories and methodologies from sociology, anthropology, and political science to contextualize religious phenomena (Cipriani et al., 2017). At the inter-faculty level, integration is realized through required integration courses for students in the science, technology, and health clusters. At the academic evaluation level, several faculties have implemented integration testing mechanisms in final exams, where students' academic work is assessed not only on methodological accuracy and empirical data, but also on the depth of its value perspective and Islamic foundation.

However, FGD participants frankly acknowledged that current integration practices remain insular and have not yet fully achieved a deep level of epistemological integration. In many cases,

integration is still understood as adding references to Quranic verses or hadith relevant to the study topic, without the formulation of a systematic integrative methodology. The classic debate between the scientification of science and the Islamization of science remains palpable, particularly in efforts to find common ground between strengthening science and technology on the one hand and strengthening the normative basis of religion on the other. This finding confirms the literature analysis that states that the main challenge to science integration in PTKIN lies not in the absence of normative commitment, but rather in the difficulty of formulating an operational and consistent integrative methodology (Mansur, 2020).

In the realm of curricular practice, the Faculty of Ushuluddin has demonstrated concrete efforts to respond to these challenges. Courses such as the Philosophy of Islamic Science, Qur'anic Epistemology, Interdisciplinary Religious Studies, and Thematic Interpretation Methodology based on contemporary issues are designed to connect normative sciences with modern scientific debates, including the ethics of biotechnology, artificial intelligence, environmental issues, and religious moderation. This curriculum aligns with the trend of PTKIN curriculum transformation, which is moving toward an integrative, contextual approach that is responsive to the needs of the modern public (Bertot et al., 2016). The existence of scientific laboratories such as the Digital Interpretation Laboratory, the Kalam and Applied Philosophy Laboratory, and the Religious and Social Studies Laboratory also strengthens the orientation of technology-based and interdisciplinary research (Reader et al., 2021).

The research activities of lecturers at the Faculty of Ushuluddin demonstrate a growing integrative trend. Several lecturers are involved in cross-faculty collaborative research linking Islamic studies with psychology, health, and social sciences. Research on Quranic anthropology, humans as biopsychosocial beings, and spiritual ethics in modern medical science are concrete examples of the integration of knowledge into research practice. This type of collaboration aligns with the global trend in Islamic higher education, which emphasizes the importance of multidisciplinary research as a medium for integrating religion and science (Irham, 2025).

The role of faculty leadership in aligning the vision of scientific integration with the university roadmap is also a significant finding. The Faculty of Ushuluddin actively adopts university policy directions that place scientific integration as the institution's epistemological vision. The development of the faculty's research roadmap, academic human resource development strategy, and integrative methodology training for lecturers demonstrate a systematic effort to maintain alignment between university policies and faculty practices. This alignment reinforces the argument that the success of scientific integration is crucially determined by effective higher education governance, namely the integration of institutional vision, faculty policies, and academic practices (Gkrimpizi et al., 2023).

The FGD results also revealed structural institutional challenges, particularly related to the placement of interdisciplinary study programs such as International Relations and Political Science, which have traditionally been under the Faculty of Social and Political Sciences. This situation often raises questions from accreditation assessors regarding the appropriateness of the academic disciplines. In response, the faculty and university proposed the establishment of a Faculty of Social and Political Sciences as part of an institutional restructuring. This proposal demonstrates that integration of knowledge is not only epistemological but also requires restructuring the institutional structure to be more rational and adaptive to disciplinary developments (García-Carmona, 2025).

From a human resources perspective, the FGD highlighted the challenges posed by the high proportion of lecturers who graduated from public universities. While this enriches academic perspectives and strengthens interdisciplinary dialogue, it also requires extra effort to build a distinct scholarly identity at UIN. The scholarly consortium is seen as strategic for reformulating the historical narrative, identity, and direction of Ushuluddin scholarly development, including strengthening understanding of historical figures who symbolize the institution (Rahman, 2025).

Good practices were also found in strengthening students' academic culture. Several study programs demonstrated excellence in literacy and writing, with students actively writing for online and national mainstream media. This activity not only enhanced students' academic competence but also broadened the faculty's social visibility in the public sphere. Furthermore, interfaith collaboration with Christian educational institutions in Eastern Indonesia was seen as a concrete and relevant form of socio-religious integration within Indonesia's pluralistic context, while also reflecting the value of religious moderation, a national agenda (Marhumah et al., 2025).

When linked to the literature on science integration, field findings and FGD results indicate that the Faculty of Ushuluddin at UIN Alauddin is on the moderate-interconnective integrative spectrum. This pattern is relevant to Amin Abdullah's concept of integration-interconnection, which emphasizes critical dialogue between normative, historical, and empirical sciences without eliminating the epistemological autonomy of each discipline (M. A. Abdullah, 2022). However, unlike the concept of Wahyu Guiding Science at UIN Bandung, which places revelation as the ontological center of all scientific structures (Mahyani et al., 2021), the Faculty of Ushuluddin at UIN Alauddin tends to emphasize a dialogical and contextual approach, with social sciences and humanities as a medium for interpreting reality.

The integration of knowledge at the Faculty of Ushuluddin (Islamic Theology) at UIN Alauddin Makassar has developed into a dynamic institutional identity. Integration is not only present in policy documents but is also reflected in the curriculum, research, laboratories, academic governance, and interfaith and interdisciplinary collaborative practices. Despite still facing epistemic and structural barriers, the faculty demonstrates strong reflective and adaptive capacity. With strengthened integrative methodologies, more rational institutional arrangements, and consistent academic policies, the Faculty of Ushuluddin has the potential to become a model for developing knowledge integration for other PTKIN (Islamic Higher Education Institutions) within the context of the transformation of Islamic higher education in Indonesia.

Strengthening LP2M Institutions

Observations and in-depth discussions with the ranks of the Institute for Research and Community Service (LP2M) at UIN Alauddin Makassar indicate that the institution has entered a relatively mature phase of institutional consolidation, both in terms of organizational structure, research governance, and epistemological orientation of scientific development. From an institutional theory perspective, this phase can be understood as the institutionalization stage, when organizational norms, structures, and practices begin to stabilize and gain internal and external legitimacy (Lustig et al., 2014). The LP2M leadership, supported by the Chairperson and Secretary and a number of strategic centers such as the Research Center, the Center for Community Service, the Center for Islamic Civilization, the Center for Gender and Child Studies, and the Center for Islamic Studies, Science, and Technology (PUKAISTEK), reflects the differentiation of institutional functions aimed at increasing the effectiveness of coordination and work specialization. This differentiation aligns with the direction of PTKIN research governance reform, which emphasizes accountability, transparency, and strengthening the strategic functions of research institutions (Endawansa & Juwono, 2024).

Furthermore, the LP2M structure serves more than just an administrative function, but also carries an epistemic role as a guide for the university's scientific orientation. Within the governance of knowledge framework, research institutions not only manage resources but also act as normative actors determining epistemological priorities and the direction of knowledge production (Lund et al., 2024). This is evident in the interaction between the Scientific Consortium of UIN Sunan Gunung Djati Bandung and the leadership of LP2M UIN Alauddin Makassar, where scientific integration is positioned as the primary foundation of cross-center research policies. Programs such as workshops on the integration of Islam and science, the development of integrative research guidelines based on religious moderation, scientific literacy forums from an Islamic perspective, and strengthening the scientific publication capacity of lecturers demonstrate that LP2M functions as a scientific policy hub. This role is consistent with Amin Abdullah's idea that scientific integration and interconnection require the existence of a supporting institution capable of translating the university's epistemological vision into operational research practices and academic policies (A. Abdullah, 2022).

The FGD findings also revealed a significant historical dimension to the practice of benchmarking between PTKIN (Public Universities). The shared historical transformation of UIN Alauddin Makassar and UIN Sunan Gunung Djati Bandung, which both changed their status to UIN in 2005, is seen as epistemic and institutional capital for building equal collaboration. In higher education benchmarking theory, such relationships are more effective when conducted between institutions with relatively similar levels of maturity and structural contexts, as they allow for the transfer of good practices without symbolic dominance (Barnard & Woodburn, 2024). Benchmarking in this context is not understood as a ranking competition, but rather as an organizational learning mechanism to strengthen institutional capacity and accelerate research policy innovation.

In terms of research management mechanisms, LP2M UIN Alauddin has developed a relatively comprehensive internal research cycle, encompassing an internal grant scheme, prioritizing integrative research themes, a proposal assessment system through independent reviewers, periodic monitoring and evaluation, and mandatory publication in SINTA-accredited and internationally reputable journals. From a modern research management perspective, this approach reflects a priority-based research funding model that positions alignment between the institution's vision and the lecturer's research agenda as the main indicator of research governance effectiveness (Chernenko et al., 2025). The establishment of integrative research themes such as interpretation and science, sharia economics and digital technology, public health based on Islamic values, and evidence-based religious moderation demonstrates a systematic effort to operationalize the integration-interconnection paradigm in research practice.

However, the FGD results also highlighted systemic structural challenges. LP2M's dependence on the Higher Education Operational Assistance (BOPT) scheme limits institutional flexibility in developing unique research clusters. Within the framework of resource dependence theory, reliance on rigid external funding sources tends to reduce organizational autonomy and limit the scope for policy innovation (Wang et al., 2021). This situation suggests that strengthening LP2M is not sufficient through internal reforms but also requires transforming the institution's status toward a Public Service Agency (BLU) scheme to make research management more adaptive to the university's strategic needs. This finding aligns with a study on the challenges of PTKIN research management following the Islamic higher education reform (Mukhibat, 2021).

The focus group discussion (FGD) also revealed a significant gap between funding for science and technology research and that for humanities and Islamic studies. From a critical epistemology perspective, this imbalance has the potential to create a hierarchy of knowledge that contradicts the spirit of scientific integration. Integration demands a dialogical and equal relationship between science and religious studies, not the subordination of one or the other. If funding disparities are allowed to persist, scientific integration risks being reduced to the dominance of science and technology symbolically legitimized by Islamic discourse (Edis, 2023). Therefore, strengthening the LP2M (Research and Community Empowerment Agency) demands the design of funding policies that are more sensitive to interdisciplinary epistemic balance.

In terms of research outputs, the LP2M leadership acknowledged that the quantitative achievements of UIN Alauddin lecturers' publications and citations were relatively high. However, critical reflections emerged regarding the low social impact of research. Much research stopped at the level of reports and scientific articles without transforming into public policy, social innovation, or improving community welfare. This awareness prompted a shift in orientation from output-based research to impact-based research. In the global literature on higher education, this shift is understood as a response to demands for public accountability of universities and the social relevance of science (Godonoga & Sporn, 2023).

In the context of religious moderation, LP2M positions this value as both a normative and operational framework for research and community service. Religious moderation is not positioned as a mere ideological agenda, but rather as a research framework responsive to national issues such as intolerance, radicalism, and low scientific literacy. This approach is consistent with the national policy of PTKIN, which prioritizes religious moderation in research and community service (Muhlisin et al., 2023).

However, the focus group discussion (FGD) confirmed that the implementation of knowledge integration still faces serious challenges at the practical level. Integration often stops at the discursive level, while in research and learning practices, a dichotomy persists between religious and general knowledge. Differences in methodological approaches, the epistemic backgrounds of lecturers, and limitations in institutional design hinder cross-disciplinary collaboration. This situation reinforces the argument that knowledge integration requires operational institutional design and structural incentives that encourage real collaboration, not just normative consensus (Coffay & Bocken, 2023).

From a governance theory perspective, LP2M UIN Alauddin demonstrates a trend toward an integrated research governance model, namely research governance that integrates epistemological direction, institutional structure, funding mechanisms, and accountability systems (Sengik et al., 2022). The differentiation of research centers reflects the fulfillment of structural governance aspects, while internal grant mechanisms and publication obligations demonstrate the implementation of

performance-based accountability. However, limited reviewer capacity and the dominance of manual monitoring indicate that LP2M is still in the structural and procedural strengthening stage, not yet fully achieving integrated digital system-based research governance as implemented by established research universities (Syarif, 2020).

The epistemic implications of strengthening the LP2M (Research Institute for the Study of Religious Studies) are significant for the implementation of knowledge integration at the university level. PUKAISTEK serves as an epistemological bridge between religious and professional faculties, as well as a space for methodological dialogue. Through collaborative research and scientific forums, LP2M operationalizes the integration-interconnection paradigm in scientific practice. This emphasizes that effective knowledge integration cannot be achieved without a structurally strong and epistemologically visionary research institution (Poole & Todd-Diaz, 2022).

Thus, the findings of observations and FGDs position the LP2M UIN Alauddin Makassar as a strategic actor in the epistemic transformation and research governance of PTKIN. Despite showing significant progress in institutional consolidation and strengthening research policies, LP2M still faces challenges in funding, cross-disciplinary collaboration, and research orientation impact. This emphasizes that knowledge integration is a long-term project that requires policy consistency, institutional readiness, and sustained epistemological commitment within the framework of PTKIN institutional transformation (Binagwaho et al., 2022).

FKIK Study Program Development

Field findings and focus group discussions indicate that the Faculty of Medicine and Health Sciences (FKIK) at UIN Alauddin Makassar is in a strategic and progressive phase of institutional strengthening. The faculty is no longer in its initial pioneering phase but has instead entered a phase of academic consolidation marked by curriculum refinement, strengthening of learning infrastructure, developing applied research, and expanding its clinical education network. This position reflects the unique dynamics of health faculties at PTKIN, which strive to balance the demands of national professional standards with the vision of integrating Islamic values into medical and health education (Tabatabai & Simforoosh, 2021).

In terms of academic structure, the Faculty of Medicine and Health Sciences (FKIK) houses several strategic study programs, including Medicine, Pharmacy, Nursing, Midwifery, and Public Health. This diversity of study programs presents complex governance challenges, given that each discipline has different competency standards, laboratory requirements, and professional regulations. FGD results indicate that the faculty has anticipated this complexity through a relatively well-developed learning system, such as dividing large classes and tutorial classes with controlled student ratios, implementing problem-based learning, and implementing a rigorous academic schedule to optimize space and facility utilization (Boon et al., 2022). This pattern aligns with common practices in health professions education, which emphasize active learning and clinical discussions as the core of the learning process (Saeed, 2021).

From a curricular perspective, the Faculty of Medicine and Medicine at UIN Alauddin Makassar demonstrates a strong commitment to the integration of Islam and medicine. Field findings confirm that this integration is operationalized through core courses such as Islamic bioethics, medical jurisprudence, spiritual care, and Islamic medical humanities. These courses are designed not merely as normative complements, but as spaces for ethical and spiritual reflection inherent in clinical practice, medical research, and the professional interactions of healthcare workers with patients and the community (Mahmood, 2020). This approach aligns with global trends in medical education that emphasize the importance of humanistic and spiritual dimensions in developing healthcare professionals with integrity (Al-Zahrani, 2021).

The integration of Islam and medicine in the FKIK curriculum also exhibits a distinctive epistemic character. Medicine is positioned as a modern scientific discipline operating with empirical methodology and global professional standards, while Islamic values serve as the ethical, ontological, and axiological foundations that guide the use of that knowledge. From the perspective of the theory of science integration in Islamic higher education, this model can be categorized as epistemic integration, namely integration that operates at the level of values, orientation, and objectives of science without negating the methodological framework of modern science (Aziz, 2020). Thus, the existence of integrative courses in FKIK is not merely a symbol of Islamic identity but also part of

an effort to reconstruct the perspective of Muslim health professionals.

In terms of learning infrastructure, field findings and focus group discussions (FGDs) indicate that the Faculty of Medicine and Health Sciences (FKIK) has undertaken gradual but serious laboratory development. The Pharmacy Study Program, for example, has laboratories for pharmaceutical technology, pharmaceuticals, pharmaceutical biology, and pharmaceutical chemistry, as well as a competency laboratory aligned with the standards of the Association of Higher Pharmacy Education Institutions. Each laboratory is equipped with essential equipment such as granulation, tableting, and natural product extraction equipment, as well as an occupational safety system based on OHS standards. The presence of these facilities demonstrates the faculty's commitment to meeting minimum accreditation standards and optimally supporting practical learning (Bougherira & Elasmara, 2023).

However, both observational and focus group discussions (FGD) findings highlight that the main challenges to laboratory development lie in financing and technological sustainability. Much laboratory equipment is very expensive and dependent on imports, requiring long-term financing strategies and strong institutional support. While some equipment can be repaired, much of it must be replaced due to technological incompatibility. This reflects the common structural challenges faced by new medical faculties in Indonesia, particularly in PTKIN (Public Universities) that are still building capacity (Sebong et al., 2025).

The network of teaching hospitals is also a key focus in the development of the Faculty of Medicine and Health Sciences (FKIK). Field findings indicate that partner hospitals have demonstrated commitment to supporting students' clinical education, but rotation room capacity and the availability of clinical teaching physicians still require strengthening. This challenge has direct implications for the quality of clinical education, given that competency-based learning is highly dependent on the intensity of supervision and the variety of clinical cases students have access to (Hutman et al., 2021). Therefore, strengthening the network of teaching hospitals is a strategic agenda that is inseparable from curriculum development and FKIK accreditation.

In the area of research and community service, the Faculty of Medicine and Health Sciences (FKIK) demonstrates a relatively clear orientation toward applied research based on community needs. Focus group discussions (FGDs) highlighted the development of natural-based medicinal ingredients as a priority focus, with examples of the development of laruna leaves, white turmeric, Javanese ginger, ginger, and various other local medicinal plants. This research has undergone standardization, formulation, and toxicity testing, providing a strong scientific basis. This orientation aligns with health literature that emphasizes the importance of community-based research and leveraging local potential as a basis for developing primary health care (Bonfim et al., 2023).

However, the main challenge faced is not the scientific aspect, but rather the downstreaming of research. Many innovations stop at the laboratory or simple community service stage without progressing to patent registration, BPOM registration, or mass production. This situation indicates a gap between academic research capacity and innovation support systems, such as business incubators, industry networks, and sustainable applied research policies (Rossoni et al., 2024). From a higher education governance perspective, this gap demands stronger integration between faculties, research institutions, and external partners to ensure that research does not remain solely an academic output.

The FGD also highlighted the role of the Faculty of Medicine and Health Sciences (FKIK) in addressing traditional medicine practices in the community, which often do not meet safety and dosage standards. FKIK views the importance of proper self-medication education as part of its community service, particularly to prevent the risk of inappropriate drug or herbal use. This promotive and preventive approach demonstrates FKIK's social relevance in addressing local community health issues, while also strengthening the faculty's identity as a health education institution based on values of well-being (Hakim, 2022).

From a theoretical perspective, the development of the Faculty of Medicine and Health Sciences (FKIK) at UIN Alauddin Makassar demonstrates alignment with the paradigm of holistic medical education and medical education from an Islamic perspective. Medical education is not understood merely as a process of transferring technical competency, but as the formation of professionals with moral integrity, spiritual awareness, and social responsibility. Principles such as respect for human dignity, justice, and the common good serve as ethical foundations that integrate clinical practice and medical research (Abbas, 2025).

However, the implementation of the integration of Islam and medicine faces several significant structural challenges. The availability of dual-competency lecturers remains limited, medical professional standards and accreditation requirements of the LAM-PTKs (National Institute of Health Sciences and Higher Education) are stringent, and the capacity of laboratories and teaching hospitals is less than ideal. These challenges require a quality-based governance approach and cross-institutional collaboration, including through benchmarking mechanisms between FKIK PTKIN (Private Health Sciences and Higher Education Institutions) (Saenz et al., 2024).

In this context, the dialogue between the Scientific Consortium of UIN Sunan Gunung Djati Bandung and the leadership of the Faculty of Medicine and Health Sciences (FKIK) of UIN Alauddin Makassar is highly strategic. Collaborative opportunities in integrative curriculum development, lecturer exchanges, joint research, and strengthening the network of teaching hospitals create space for consolidating the quality of Islamic-based medical education nationally. Thus, the development of FKIK not only has implications for strengthening the internal faculty but also contributes to the development of a PTKIN medical education ecosystem oriented toward ethics, professionalism, and public service based on the values of *rahmatan lil alamin* (blessing for the universe) (Hafidz, 2023).

Contribution of Academic Visits to Institutional Development

The academic visit of the UIN Sunan Gunung Djati Bandung Scientific Consortium to three strategic units of UIN Alauddin Makassar made a significant contribution to the expansion of epistemic networks, strengthening scientific integration, and maturing the direction of PTKIN institutional development. This contribution becomes even more meaningful when placed within the framework of UIN Alauddin Makassar's long-term policy, which was initially designed through an institutional development roadmap until 2039. The roadmap was compiled using a best practices analysis approach, namely by referring to leading Asian universities that have successfully integrated research excellence, governance, and the values of Islamic civilization in academic development (Walid et al., 2025). In this context, the academic visit does not stand as an incidental activity, but rather as part of an institutional learning practice that aligns with the university's strategic direction towards strengthening scientific integration and increasing global competitiveness.

One of the key added values of this visit lies in the direct exchange of knowledge and institutional practices. The UIN Bandung delegation had the opportunity to empirically observe how UIN Alauddin's vision of scientific integration is operationalized in curricular policies, research, institutional governance, and faculty professional development. This aligns with UIN Alauddin's development spirit as a university that is not only oriented towards research but also moving towards becoming an entrepreneurial university that produces impactful and sustainable innovation (Cai & Ahmad, 2023).

Field findings indicate that cross-unit discussions serve as a critical reflection space that brings together UIN Bandung's epistemological framework and UIN Alauddin's scientific integration implementation patterns, thus generating new insights into how scientific integration can be synergized with resource readiness, policy dynamics, and the academic transformation agenda of contemporary PTKIN. From this perspective, benchmarking functions as an arena for the production of shared meaning that broadens the horizon of institutional thinking through direct interaction between institutional agents who share a common academic vision (Priebe et al., 2025).

The epistemic network that emerged from this visit also demonstrated a shift in inter-PTKIN relations from administrative communication to collaboration based on scientific capabilities. This was reflected in intensive discussions on the development of an integrative curriculum at the Faculty of Ushuluddin (Islamic Theology), the governance of research and scientific publications at the LP2M (Institute for the Study of Islamic Studies), and the strengthening of Islamic values-based medical professionalism at the Faculty of Medicine and Health Sciences (FKIK). These practices align with UIN Alauddin's development strategy in Phases II and III of its institutional roadmap, which emphasizes improving the performance of the Tri Dharma Perguruan Tinggi (Three Pillars of Higher Education), establishing research centers, increasing international publications, and strengthening academic collaboration at the national and regional levels in Southeast Asia. These visits provide a platform for sharing practices that are not only technical but also strategic, demonstrating how each academic unit builds its epistemological distinction while maintaining the university's vision as a PTKIN based on integrated knowledge (Agrifoglio et al., 2021). The literature

confirms that interactions between universities within a shared regulatory and scientific ecosystem are crucial for creating sustainable knowledge spillover (Dzwigol et al., 2023).

Benchmarking as a mechanism for institutional knowledge transfer is also evident in a comparison of the scientific structures of the two PTKIN. UIN Alauddin demonstrates differentiated LP2M governance with a strong orientation toward research center management, international publications, grant management, and the development of research-based religious moderation. This pattern aligns with the direction of strengthening institutional research, which serves as the foundation for Phases IV and V of the university's development roadmap, namely strengthening competitive advantage and global recognition. On the other hand, UIN Bandung demonstrates strength in the consolidation of integrative epistemology through cross-faculty scientific consortia. This comparison is not intended as a hierarchy of excellence, but rather as a means of identifying innovation opportunities and opportunities for contextual policy adoption. This reinforces the view that benchmarking in higher education is effective when it facilitates two-way dialogue and reciprocal learning, rather than simply one-way evaluation (Yan et al., 2025).

From a curriculum and epistemology perspective, interactions within the Faculty of Ushuluddin demonstrate that benchmarking can serve as a critical reflection tool on the effectiveness of implementing knowledge integration. UIN Alauddin practices knowledge integration by strengthening the study of tafsir, hadith, Islamic thought, and contemporary issues with a multidisciplinary approach, which aligns with the university's vision as a center for enlightenment and scientific transformation based on Islamic civilization. This practice inspires UIN Bandung to further mainstream an interconnected approach, particularly in the development of a digital-based religious studies laboratory and interdisciplinary methodology. The literature on knowledge integration emphasizes that this collaborative model strengthens the relevance of religious studies in facing the challenges of digital society and modern science (Masa'deh et al., 2025).

Another added value is evident in the research policy lessons learned from LP2M. UIN Alauddin has developed a structured internal grant mechanism, reprioritization of research themes that support the integration of science and religion, and accountability-based reporting governance. These practices align with the research management principles of world-class universities, which emphasize process integration, quality governance, and an orientation toward academic and social outcomes (Tabish, 2024). For UIN Bandung, this experience serves as an important reference in strengthening more adaptive and productive research governance, while also aligning with the demands of the Ministry of Religious Affairs' national policies.

In the medical sector, dialogue with the Faculty of Medicine and Health Sciences (FKIK) demonstrated that the integration of knowledge does not stop at the philosophical level but is concretely implemented in the structure of clinical teaching, professional ethics, and community research. FKIK UIN Alauddin developed a curriculum that incorporates elements of medical humanities and spiritual care, thus affirming PTKIN's identity in preparing professional healthcare workers while also being grounded in Islamic ethics. This finding is relevant to the university's development agenda towards global recognition, where medical education is required to be responsive to the needs of humanistic and religiously sensitive healthcare services (M. A. Abdullah, 2010). This benchmarking opens up opportunities for collaboration in medical research, the development of professional ethics modules, and the strengthening of the network of Islamic-based teaching hospitals.

Theoretically, the effectiveness of benchmarking in the context of PTKIN can be understood through three main approaches: strategic benchmarking, process benchmarking, and competence benchmarking (Alsharari & Aljohani, 2024). These three approaches are clearly reflected in the academic visit and align with UIN Alauddin Makassar's institutional development framework, which is designed in stages and measurable until 2039. Thus, benchmarking serves not only as an evaluation instrument but also as an institutional transformation mechanism that strengthens the vision of science integration, research governance, and academic excellence at PTKIN.

Ultimately, the synthesis of all the findings from the visit shows that academic benchmarking based on vision, institutional roadmap, and best practice learning has great potential to become a strategic instrument for PTKIN in strengthening scientific integration, improving research performance, and encouraging academic innovation that is relevant to societal demands and global developments.

Conclusion

This study confirms that the academic visit of the UIN Sunan Gunung Djati Bandung Scientific Consortium to UIN Alauddin Makassar has substantive significance in strengthening scientific integration and the institutional development of PTKIN. Field findings indicate that scientific integration at UIN Alauddin Makassar is no longer at a conceptual or symbolic stage, but has moved towards a relatively established institutionalization process. Scientific integration appears to be operationalized through academic policies, curriculum development, research management, and institutional governance at the faculty and strategic unit levels, thus shaping the direction of institutional development more systematically.

At the epistemological level, this study demonstrates that the model of knowledge integration developed at UIN Alauddin Makassar tends to be moderate and interconnected. This approach allows for ongoing dialogue between normative Islamic sciences and the methodology of the social sciences, humanities, and modern sciences without becoming trapped in epistemological dichotomies or purifications. These findings reinforce the argument in the literature that the success of knowledge integration in Islamic higher education is determined not solely by the clarity of conceptual paradigms, but by the institution's ability to translate these paradigms into consistent and sustainable academic practices.

From an institutional perspective, this study demonstrates that scientific integration is highly dependent on the design of academic governance and leadership. The Faculty of Ushuluddin serves as an epistemic center, building ontological and normative foundations for cross-faculty scientific development. The Institute for the Development of Islamic Studies (LP2M) plays a strategic role in directing scientific research and publications to align with the university's vision of scientific integration. Meanwhile, the Faculty of Medicine and Health Sciences (FKIK) demonstrates how the integration of Islamic values can be internalized in health professions education through curriculum, clinical ethics, and community research. These three units demonstrate that scientific integration can only function effectively if supported by a clear organizational structure and coordinated working mechanisms.

Theoretically, the findings of this study contribute to enriching the study of science integration by positioning institutions as the primary locus of epistemological transformation. Science integration is not simply understood as the reconstruction of scientific discourse, but as a socio-organizational process involving policies, resources, and academic culture. Thus, this study complements the existing literature on science integration, which tends to emphasize the philosophical dimension, by demonstrating the importance of governance and management dimensions of higher education in ensuring the sustainability of science integration.

The practical implications of this research are evident in the role of benchmarking as an institutional learning mechanism between PTKIN (Private Universities). Academic visits enable the exchange of best practices, critical reflection on internal policies, and the identification of opportunities for adaptation and innovation. Benchmarking is not understood as a mechanical process of imitation, but rather as a means of institutional dialogue that enriches perspectives and strengthens the capacity of each university. In this context, collaboration between PTKIN institutions has the potential to accelerate the consolidation of knowledge integration on a national scale.

However, this study also identified several limitations. Epistemic challenges remain evident in the unequal understanding of knowledge integration among lecturers and students. Furthermore, structural limitations such as research infrastructure, laboratory capacity, and the demands of national and professional accreditation standards remain obstacles to developing a more in-depth integration model. Furthermore, the study's focus on a single institutional case limits the generalizability of the findings to all PTKIN (Private Universities) in Indonesia.

Based on these findings, further research should be directed at comparative studies across Islamic higher education institutions (PTKIN) using more diverse methodological approaches, including longitudinal analyses to assess the impact of knowledge integration on graduate quality, research productivity, and the institution's academic reputation. Further studies should also explore the relationship between epistemic integration and institutional performance within the context of national higher education policy. Thus, knowledge integration can continue to be developed not only as a normative identity of Islamic higher education institutions, but as a relevant, measurable, and sustainable institutional transformation strategy.

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