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ARTICLES

Shifting the scientific paradigm for the transformation of higher education: Experience at State Islamic University (UIN) in Indonesia

Ahmad Muthohar, Abdul Ghofur, M. Muksin Jamil, and Muhammad Sulthon

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Shifting the scientific paradigm for the transformation of higher education: Experience at State Islamic University (UIN) in Indonesia

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Abstract: Every university has many ways to make changes, and institutional transformation is one of the strategic choices to achieve excellence. However, the transformation of higher education is still dynamically defined and open. The practice also has many models and differences. This article examines the scientific paradigm shift to rethink the practice of transformation for higher education. Identifying new scientific paradigms, shifting processes, models used, practical steps, factors, and challenges is the primary concern of research work. This research was conducted qualitatively with a narrative approach. Multi-site studies at several State Islamic Universities (UIN) in Indonesia were reviewed to obtain findings about the different models applied. The results show that the transformation of higher education is simultaneously carried out by changing the institutional status and renewing the scientific paradigm. Science integration is used as a new scientific paradigm even

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though, in practice, each university has a different model. This new paradigm has wide-ranging impacts, such as eliminating scientific dichotomies that have long been practiced, expanding multidisciplinary scientific structures, and adding authority to develop faculties and study programs. Another impact is the existence of new awareness and enthusiasm for several changes in the aspects of it. Many challenges need to be anticipated to obtain better quality, such as the need for curriculum reformulation, changes in organizational behavior, a new image, and many other programs. We recommend this finding as an example of good practice in improving the quality and institutional system of higher education. To understand the wider impact of this transformation process, such as competency and graduate outcomes, changes in organizational behavior, the direction of research and community service programs, and their social impact in the future, more research on sustainability is needed.

Keywords: Dichotomy of science; higher education; integration of science; paradigm; transformation; university.

I. Introduction

Indonesia has a new policy on the development of higher education (HE). In the last 20 years (2002 to 2021), the president of the Republic of Indonesia changed the status of 23 HE institutions to universities. The university was previously in the form of the State Islamic Institute (IAIN) and was changed to the State Islamic University (UIN). The HE database shows that Indonesia currently has 4,550 institutions in various forms: universities, institutes, polytechnics, colleges, and academies.[1]

In the Indonesian education system, the institutional status consists of state and private. The state status is owned and managed by the government. While the private status is owned and managed by the community, generally by foundations and community organizations. In particular, the management of general HE is the task of the Ministry of Education and Culture. While religious HE by the Ministry of Religion. Indonesia currently has 863 religious HE consisting of three forms, universities, institutes, and colleges. 58 of them are public and the remaining 805 are private.[2] Although only 6.7% of the total, the presence of these 58 state-owned institutions represents the central government in 34 provinces. The majority are located in every provincial capital and important city in Indonesia.

[1] Ministry of Education and Culture of the Republic of Indonesia, "Higher Education Database," [in Indonesian] Database of Higher Education in Numbers, 2022, https://pddikti.kemdikbud.go.id.

[2] Ministry of Religious Affair of the Republic of Indonesia, "Number of Islamic Religious Higher Education," [in Indonesian] Education Management Information System (EMIS), 2022, http://emispendis.kemenag.go.id/ptkidashboard/Kelembagaan/PTKIBerdasarkanStatusLembaga.

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With such a position, the new status of 23 UIN becomes a unique and interesting phenomenon to study because it has occurred massively in the last 20 years. Every change in institutional status generally contains the aspired goals and visions. The transformation process carried out will be followed by steps of change, creating better opportunities and facing challenges that must be resolved to meet the expected goals and ideals.

Based on the Presidential regulation of the Republic of Indonesia, there are two main reasons and considerations for the change in the status of many of these universities, namely institutional transformation of higher education (THE) and integration of sciences (IOS).[3] Direct mention in the text of state regulations shows that these two reasons are very important for Indonesia in providing directions for future HE development. Universities that have recently changed status must also take steps to transform their institutions by using IOS as a new scientific approach.

In global discourse, the THE and IOS are the topics that are widely discussed. The two are also closely related to the study of scientific paradigm shifts. THE discusses ideals and innovations about the university's future, builds expectations, criticizes old practices, and develops the necessary steps to present fresh ideas to organize the university to become a center of sciences and the development of a better civilization. At the same time, IOS relates to becoming a new agenda as a value system or scientific system that underlies the aspirations of university change on a broader scale. IOS is also known as a scientific paradigm that has existed for a long time and has become an agenda that continues to spread to various countries in the world. It is not only limited to countries with a majority Muslim population, such as Indonesia, but also Western countries since the 20th century.

Since the 1970s, the relationship between organizational change and paradigm shift has begun to be discussed but there are still many perspectives to date. Is organizational change a paradigm shift in itself, or does a particular paradigm shift affect the forms of organizational change? Allen W. Imershein and other scientists once wrote about organizational change as a paradigm shift.[4] But at the same time, the discourse around the IOS is also widespread

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[3] President of the Republic of Indonesia, "Presidential Regulation Number 40,41,42,43,44,45 of 2021 Concerning the Transformation of IAIN into UIN," [in Indonesian] 2021, https://setkab.go.id/perpres-terbit-enam-iain-bertransformasi-jadi-uin/.

[4] Allen W. Imershein, "Organizational Change as a Paradigm Shift," *The Sociological Quarterly* 18, no. 1 (January 15, 1977): 33–43, https://doi.org/10.1111/j.1533-8525.1977.tb02160.x; Hasan Simsek and Karen Seashore Louis, "Organizational Change as Paradigm Shift," *The Journal of Higher Education* 65, no. 6 (November 1, 1994): 670–95, https://doi.org/10.1080/00221546.1994.11774746.

among scientists in various countries as one of the scientific paradigm models which is considered to be able to contribute to organizational change, especially HE as an educational institution.[5] In scientific contexts, the IOS also has been the subject of much research and remains an open and challenging discourse. It is acknowledged that there has been extensive discussions and differens about the definition, level, and structure of scientific integration.[6]

This research investigates the experience of the State Islamic University (UIN) in Indonesia, which received an official state mandate to THE institutions with a paradigm based on IOS. Therefore, this article examines the process of shifting paradigms based on science integration, defining concepts, and explaining implementation models, impacts, and challenges faced. Practically, the findings are expected to contribute to and inspire good practices in THE institutions in the world, both in developing institutional organizations and comprehensive science structures, and can eliminate the sciences dichotomy that has been practiced so far.

II. Theoretical framework

Discourses about paradigm shifts and THE can be identified as starting in the 1960s when systems theory began to dominate the study of organizational change. Organizations are understood as adaptive organisms that aim for balance due to a changing environment. Systems theory has directed its focus on the importance of the relationship between the internal conditions of an organization and its environment.[7]

The systems theory uses the basic assumption that the organizational environment should be served slowly with adaptive change. While some experts also argue that educational organizations are systems that tend to be unusual with changes on a large scale and quickly but loosely and couple

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[5] Ulyana Parpan, "Paradigm of Higher Education in Conditions of Integration Challenges," *Visnik Nacional'nogo Universitetu «Lvivska Politehnika». Seria: Uridicni Nauki* 2018, no. 889 (March 20, 2018): 30–36, https://doi.org/10.23939/law2018.889.030; Donna L Rogers, "A Paradigm Shift: Technology Integration for Higher Education in the New Millennium," *AACE Review (Formerly AACE Journal)* 1, no. 13 (2000): 19–33, https://www.learntechlib.org/p/8058; David Skorton and Ashley Bear, *The Integration of the Humanities and Arts with Sciences, Engineering, and Medicine in Higher Education: Branches from the Same Tree* (Washington, DC: The National Academies Press, 2018), https://doi.org/10.17226/24988.

[6] Jarosław Boruszewski and Krzysztof Nowak-Posadzy, "From Integration to Modelling. On a Neglected Function of the Methodology of Humanities," *Studia Metodologiczne* 39, no. March (2019): 253–96, https://doi.org/10.14746/sm.2019.39.10.

[7] Simsek and Louis, "Organizational Change as Paradigm Shift," 670.

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system.[8] Therefore, the THE as a relevant educational organization is studied through the perspective of a paradigm shift.

II.1. The scientific paradigm shift

Paradigm is still understood with many definitions, such as ways of thinking, perspectives, conceptual schemes, and worldviews; some are interchanging with the term ideology. However, it is generally agreed that a paradigm is a set of beliefs and values that trigger action. Thus, in the context of the THE, the shift in the scientific paradigm here is meant as a shift in values and beliefs about the scientific system that will be applied and can include changes and actions in HE. These changes can be structure, strategy, culture, leadership, management, achievement, and role of each person.

Scientist Thomas S. Kuhn has contributed greatly in laying the foundation for the study of paradigm shifts through the theory of scientific evolution.[9] According to him, the paradigm is a normal science in which certain scientific theories are dominant and not questioned in the long term and has become a world view can be changed through predictable paths through revolutionary leaps. Kuhn's scientific theory of evolution consists of five separate and sequential phases: Normality, anomaly confrontation, crisis, selection/revolution, and the new normal.

Normality or often called *Normal Science* is a period in which scientists work and develop science with a certain dominant paradigm. However, in the next phase, an *Anomaly*, the scientific paradigm cannot avoid conflicts or discrepancies between theory and reality so a deadlock occurs and the existing paradigm cannot provide adequate answers. The peaking anomaly caused a crisis and the existing paradigm began to be considered insignificant. *Revolution,* responding to a serious crisis as a major change in science, where a new paradigm emerges to solve the problems faced by the old paradigm. Furthermore, the old paradigm began to decrease in influence and was replaced by a paradigm as a form of the *New Normal* or *New Paradigm*.[10]

In the context of organizational change, normality is a period marked by a particular paradigm that dominates organizational activities and guides every

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[8] Karl E. Weick, "Educational Organizations As," *Administrative Science Quarterly* 21, no. 1 (1976): 1–19, http://www.jstor.org/stable/2391875.

[9] Thomas S Kuhn, *The Structure of Scientific Revolutions*, II (Chicago: The University of Chicago Press, 1970), https://doi.org/10.5840/philstudies196413082.

[10] Ahmad Muthohar, *Emancipatory Islamic Education Paradigm*, [in Indonesian] ed. Anni Rosydah, 1st ed. (Semarang: Fatawa Publishing, 2022), 19–20, http://repository.uinsi.ac.id/handle/123456789/2915.

scientific activity that is carried out. Anomaly is a period when the organization begins to feel slow change either due to unanswered puzzles or unpreparedness in dealing with sudden changes outside the organization. Therefore, the organizational elite must face anomalies with various stimuli that are uncertain for a long time. As a result of the mounting anomaly, the organization will experience multiple problems, such as declining market share, stagnant organizational culture, low performance, and so on. Every member of the organization began to look for new perspectives both from within themselves and transferred from outside the organization. The selection of revolution is when an organization chooses a new paradigm accompanied by revolutionary steps, including accessing certain powers and other important decisions to produce renewed normalcy. When a new paradigm starts to dominate, it will be accompanied by organizational enthusiasm accompanied by a new structure and way of working by the mainstream of its renewal.

This justification leads to one of the goals of this study, which is to look at how scientific paradigms change. This article is meant to 1) investigate the old paradigm (what is the prevalent paradigm before the new paradigm?); 2) investigate anomalies (what are the problems that trigger the need for a replacement paradigm?); 3) explore scientific aspects (what model of action is taken when facing anomalies, events, external trends, and competing paradigms that exist globally?); and identify new paradigms (what main meaning, characteristics, symbols, metaphors, and models are chosen?).

II.2. The transformation of higher education

The transformation has become an important term in every discipline and area of life. We can easily identify the meaning that transformation is closely related to a better future, building hope and the emergence of fresh ideas on how an entity is conceived, organized, practiced, and maintained for change and excellence. Transformation relates to the production of knowledge for the benefit of society, cultural growth, and focusing on meeting the challenges of the future.[11] THE means the process of building university progress that is carried out consistently to produce a better future through knowledge that is useful for society.

Du Preez et al. have suggested that although the transformation is a complex construction process, it is open to changes in structure, institutional

[11] Søren S.E. Bengtsen and Ryan Evely Gildersleeve, *Transformation of the University : Hopeful Futures for Higher Education*, 1st ed. (London: Routledge, 2022), https://doi.org/10.4324/9781003102922.

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culture, and specific elements such as curriculum and academic and student experiences.[12] The process, according to Pine and Gilmore, relates to the experience of seeking more lasting benefits and values and may want to be changed by their experiences, realizing dreams, or achieving aspirations.[13] Mermiri considers that transformation is related to 'meaning' and 'interaction'. Products and services are selected based on how they will change people's lives or the way they think.[14] Transformation is created through the interaction between products, consumers, and producers who together make changes according to the meaning and ideal perspective that is believed so that there is a shared process.

Therefore, transformation is related to a paradigm as a way of thinking and worldview. The essence of transformation is the development of a new worldview.[15]Anderson calls it an extension of people's worldview.[16] Tolliver and Tisdell also view that transformation focuses on changing or shifting the way a person is in the world, understanding about oneself, and relationships with others.[17] There is also a belief dimension related to revising their belief system and a behavioral dimension related to making lifestyle changes. Another major part of the transformation is the ability to connect and communicate with others, namely socialization.[18] Personally, socialization

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[12] Petro Du Preez, Shan Simmonds, and Anné Hendrik Verhoef, "Rethinking and Researching Transformation in Higher Education: A Meta-Study of South African Trends," *Transformation in Higher Education* 1, no. 1 (2016): 7, https://doi.org/10.4102/the.v1i1.2.

[13] B Joseph Pine, "How B2B Companies Create Economic Value by Designing Experiences and Transformations for Their Customers," *Strategy & Leadership* 43, no. 3 (January 1, 2015): 2–6, https://doi.org/10.1108/SL-03-2015-0018; B. Joseph Pine and James H. Gilmore, "A Leader's Guide to Innovation in the Experience Economy," *Strategy and Leadership* 42, no. 1 (2014): 24–29, https://doi.org/10.1108/SL-09-2013-0073.

[14] Tina Mermiri, *Beyond Experience: Culture, Consumer and Brand* (London: Nutmeg house, 2009).

[15] Jack Mezirow 1923-2014, *Education for Perspective Transformation : Women's Re-Entry Programs in Community Colleges* (New York : Center for Adult Education, Teachers College, Columbia University, 1978., 1978), https://search.library.wisc.edu/catalog/999504700102121.

[16] Dean Anderson and Linda Ackerman Anderson, *Beyond Change Management : Advanced Strategies for Today's Transformational Leaders* (San Francisco, CA: Jossey-Bass a Wiley Company, 2001).

[17] D. Tolliver and E. Tisdell, "Engaging Spirituality in the Transformative Higher Education Classroom," in *New Directions for Adult and Continuing Education. Teaching for Change: Fostering Transformative Learning in the Classroom*, ed. Taylor Ellis, 19th ed. (San Francisco, CA: Jossey-Bass, 2006).

[18] Jack Mezirow, "Learning to Think Like an Adult : Core Concepts of Transformation Theory," in *Learning as Transformation, Critical Prespective on a Theory in Progress*, ed. Jack Mezirow (San Francisco: Jossey-Bass, 2000).

will help develop openness, self-confidence, and self-esteem,[19] but Mezirow's theory also emphasizes that transformation requires critical reflection, which can change beliefs, attitudes, opinions, and reactions.

Based on these conceptions, the transformation has a relationship with the paradigm. The paradigm shift is a natural and open process resulting from critical reflection on the reality based on experience to seek better values to produce changes and future progress. In this process, the transformation is carried out based on understanding and belief and then followed by more systematic action steps so that the worldview can obtain the future. This concept is in line with Thomas S. Kuhn's theory of the paradigm shift process. Paradigm as a normal view of science when experiencing anomalies and crises will encourage revolutionary steps to produce a new paradigm that is believed to be more appropriate. This process has changed.

Thus, we understand that the THE through a scientific paradigm shift set by the university is an open process of a reflective, interactive, and collaborative process to produce changes in the structure and institutional culture of the university by the ideals of a world view that is considered ideal.

II.3. The integration of science and its concepts in an islamic context

The concept of IOS is still open and dialectical. Terms, definitions, and methodologies will be adapted to the contexts. Integration linguistically means assimilation into a unified or merging different activities, programs, and components into one functional unit.[20]

When associated with science, it means assimilation or merging of different sciences into one functional unit. IOS can be understood as a concept of an approach to the development of scientific structures based on paradigms and principles of integration. Integration is an effort to reunite conditions and models that have been separated. Generally understood as harmonize the relationship between religious science and general science.

But in practice, there are many differences in trends both in definition, level and structure. Jarosÿaw Boruszewski and Krzysztof Nowak-Posadzy in their research stated that in the definition of science integration, there are still differences, whether integration means juxtaposition, connection, or merging.[21]

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[19] Gail Holland Wade, "A Concept Analysis of Personal Transformation," *Journal of Advanced Nursing* 28, no. 4 (1998): 713–19, https://doi.org/10.1046/j.1365-2648.1998.00729.x.

[20] Ministry of education and culture of the Republic of Indonesia, "Indonesia Dictionary," [in Indonesian] 2020, https://kbbi.kemdikbud.go.id/.

[21] Boruszewski and Nowak-Posadzy, "From Integration to Modelling. On a Neglected Function of the Methodology of Humanities," 255.

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According to him, integration is connecting findings from various scientific disciplines; it is not just a juxtaposition and it is not yet a merger. In addition, the term integration is also often interchanged with unification,[22] interdisciplinary or multidisciplinary.[23] However, the difference between these terms can be used to understand the purpose of this research.

Furthermore, at the level of integration, it is known that there are several aspects including epistemological-methodological, practical-institutional, and ideational aspects. Whereas in the structure of science, integration discusses aspects of how integration is realized, so finding the best model is a dynamic project.

In particular, IOS in the context of the Islamic scientific tradition also has its own form, although it cannot be separated from general discourse. Its specificity lies more in terms of history, internal agenda, and manifestation of concepts. According to the object of this study, IOS at UIN in Indonesia is related to the concept of Islamization of sciences that has been studied by Muslim scientists before. But in Indonesia, its manifestation is better known as IOS.

In contemporary Islamic history, the IOSs is a follow-up to the idea of Islamization of science initiated by past Muslim scientists as a follow-up to the Islamic reform movement. It is can be traced from the scientific works of Hossein Nasr which were spread in the 1960s. Nasr assessed that there was no fundamental difference between 'al Ilm' (Islamic science) and 'Scientia' in Latin terms or Western tradition. The difference is in the methodological aspect. The Islamic scientific tradition does use not only rational methods but also textual and even intuition. However, because of the condition of Muslims who are left behind in global civilization, it is necessary to Islamize science, as an effort to transform modern science so that the Muslim community can understand it.[24]

The next idea was developed by Muhammad Naquib al Attas through the Islamization of the science project.[25] The Islamization of science cannot be

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[22] Philip Kitcher, "Explanatory Unification," *Philosophy of Science* 48, no. 4 (May 28, 1981): 507–31, http://www.jstor.org/stable/186834.

[23] J Britt Holbrook, "What Is Interdisciplinary Communication? Reflections on the Very Idea of Disciplinary Integration," *Synthese* 190, no. 11 (July 25, 2013): 1865–79, https://doi.org/10.1007/s11229-012-0179-7; Rolf Hvidtfeldt, "Interdisciplinarity as Hybrid Modeling," *Journal for General Philosophy of Science* 48, no. 1 (May 28, 2017): 35–57, http://www.jstor.org/stable/44697645.

[24] Syed Hossein Nasr, *Science and Civilization in Islam* (Cambridge: Harvard University Press, 1968); Syed Hossein Nasr, *An Introduction to Islamic Cosmological Doctrines* (Cambridge: Harvard University Press, 1964); Syed Hossein Nasr, *Islamic Science an Illustrated Study* (London, 1976).

[25] Syed M. Naquib Al Attas, *Islam and Secularism* (Kuala Lumpur: ABIM, 1978); Syed M. Naquib Al Attas, *Islam and The Philoshopy of Science* (Kuala Lumpur: ISTAC, 1989);

done simply by bringing together aspects of epistemology and axiology but requires ontological reconstruction. its main basis is to change the secular perspective. The Islamization of science is an effort to liberate science from secular meanings, ideologies, and principles so that a new science is formed by Islam. This view is slightly different from Nasr's who links the Islamization of science with epistemological and ontological paradigms related to the scientific perspectives that exist in the world today.

Operationally, Ismail Raji Al-Faruqi suggested reintroducing modern scientific disciplines into Islamic insight after critically examining and establishing procedural steps for the implementation.[26] The International Institute of Islamic Thought (IIIT) founded by al Faruqi in Washington, also recommends the importance of transforming the Islamization of science in Education. However, It is not just a synthesis of modern sciences with Islamic sciences but must start from the ontology aspect.[27] Fazlur Rahman gave a critical note that all disciplines are unified. Human morality as a user of science and technology makes a difference. Science is neutral; mastering it is mandatory, even though it is taken from western civilization.[28]

The concept of Islamization of science in its development has influenced Muslim scientists in Indonesia. With the same substance, it is better known as the IOS in Indonesia. Amin Abdullah, with the concept of Integration-interconnection of Science, explained that dialogue is needed to complement each other when there is a gap between religion and science. So far, there has been a view that clashes religion with modernity, giving rise to a dichotomous epistemological construction of sciences. It needs to be objectified by understanding science theoanthropocentrically. We need an interconnection approach between general science and Islamic science. Dialogue between the two is a strategy for integrating religious texts into the context. Integration-interconnection of knowledge is the concept of reuniting Islamic sciences with general or modern sciences to achieve an integrated and interconnected science unity as a solution.

Syed M. Naquib Al Attas, *Islam the Concept of Religion and The Foundation of Ethics and Morality* (Kuala Lumpur: Angkatan Belia Islam Malaysia (ABIM), 1976).

[26] Ismail Raji al Faruqi, *Islamization of Knowledge: General Principles and Work Plan*, 2nd ed. (Virginia, USA: International Institute of Islamic Thought (IIIT), 1981), https://www.muslim-library.com/dl/books/English_Islamization_of_Knowledge_General_Principles_and_Work_Plan.pdf.

[27] Ziauddin Sardar, *Intellectual Jihad: Formulating Parameters of Islamic Science*, [in Indonesian] ed. AE Priyono (Surabaya: Risalah Gusti, 1998), 35–37.

[28] Fazlurrahman, *Islam and Modernity* (Chicago: University of Chicago, 1982).

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The concept of IOS in Indonesia can also be studied through the work of Abdurrahman Mas'ud, known as 'Non-dichotomous education; or 'Humanist Education'.[29] Also Imam Suprayogo with the concept of 'Tarbiyah Ulul Albab' that symbolized by 'Tree of science'.[30] The concept of Imam suprayogo inspired Azhar Arsyad with the name 'cemara ilmu' (the fir science).[31] The choice of this 'fir' tree is an illustration of the emphasis on the importance of the 'conical' for IOS that symbolizes a synthetic interconnection between elements that ultimately represents the highest transcendental.

In the operational scope, two models can be used, namely the Islamization model of the general sciences and the choice model between Integration and Interconnection. If general science and religion can be combined, integration is used, if not, interconnection is used. Armahedi Mahzar also provides advice on the operationalization of scientific integration including institutional, conceptual, operational, and architectural implementation. Each of these aspects of implementation must be clearly defined in a methodology.[32] From this reason, in the context of the THE institutions, the IOS needs to follow up on a more operational formulation into the scope of these aspects so that it does not stop only on scientific discourses.

III. Methods

This research is field research[33] with a multisite sample consisting of 4 UINs, namely UIN Sunan Kalijaga (SK) Yogjakarta, UIN Maulana Malik

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[29] Abdurrahman Mas'ud, *Initiating Nondichotomic Education* [in Indonesian] (Yogyakarta: Gama Media, 2002); Abdurrahman Mas'ud, *Towards a Humanist Islamic Paradigm* [in Indonesian] (Jogjakarta: Gama Media, 2003); Abdurrahman Mas'ud, *Paradigm of Humanist Islamic Education* [in Indonesian] (Jogjakarta: Ircisod, 2020).

[30] Imam Suprayogo, "Building the Integration of Science and Religion: The Experience of UIN Malang," [in Indonesian] in *Integration Sciences and Religion: Interpretation and Action*, ed. Zainal Abidin Bagir (Bandung: Mizan, 2005); Imam. Suprayogo, *Paradigm of Islamic Scientific Development Perspective of UIN Malang* [in Indonesian] (Malang: UIN-Maliki Press, 2006).

[31] Azhar Arsyad, "Fir Integration and Interconnection of Science and Religion," [in Indonesian] *HUNAFA: Jurnal Studia Islamika* 8, no. 1 (2011): 1, https://doi.org/10.24239/jsi.v8i1.82.1-25; Azhar Arsyad, "Integration Tree and the Interconnectivity of Science and Religion," *Kalimah* 14, no. 2 (2016): 115, https://doi.org/10.21111/klm.v14i2.608.

[32] Armahedi Mahzar, "Science Integration and Religion : Models and Metodology," [in Indonesian] in *Sciences Integration and Religion: Interpretation and Action*, ed. Zainal Abidin Bagir (Bandung: Mizan, 2005).

[33] Bogdan and Biklen, *Qualitatif Research for Education: An Introduction to Theory and Methods* (Boston: Aliyn and Bacon. Inc, 1998), 62.

Ibrahim (MALIKI) Malang, UIN Sunan Ampel (SA) Surabaya, and UIN Walisongo (WS) Semarang. Changes in status to university from 'institute' in the first cluster in Indonesia were considered in selecting the sample and determining it. Their step in implementing a new scientific paradigm based on IOS in their institutional transformation is also an important reason for us to choose them. The aim is to understand the processes and models they use and their impact on the THE institutions so that they can be transferred to a wider situation to contribute to the development and innovation of HE institutions.

The method uses a qualitative research model by following Creswell's theory with a narrative approach.[34] The narrative approach is used to explore and explain the experience of changing the scientific paradigm and its impact on the transformation of tertiary institutions carried out by each UIN. To interpret it, several data collection techniques were used, including Field observations, interviews, and a study of the university's main documents and archives.[35]

Primary documents and university archives (N=29) were examined including statutes, vision and mission, institutional profile, quality policies, quality manuals, quality standards, curriculum documents, annual reports, and research programs, community service programs, and others. Three main documents (statutes, vision and mission, and institutional profile) issued after the change in status to a university with a new scientific paradigm were analyzed to find a new model for university transformation. Because the document contains the intent and design of a new scientific paradigm, the design direction for institutional transformation and becomes a reference for derivative documents.

Information from the document is also compared with similar documents but published before the change in status to the university to see significant changes. Secondary documents in the form of many research literature and scientific publications by lecturers and professors are also reviewed to see if there is an influential role associated with this research. Likewise, the shape and design of the new logo are also reviewed to find out the ideals, vision, and values developed.

Purposive sampling interviews with university officials such as rectors, deans, heads of study programs, unit heads, lecturers, and administrative

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[34] John W Creswell, *Qualitative Inquiry and Research Design : Choosing among Five Approaches*, ed. Vicki Knight, 3rd ed. (london: Sage Publication Ltd., 2013).

[35] Creswell, 100; Bogdan and Biklen, *Qualitatif Research for Education: An Introduction to Theory and Methods*; Norman K. Denzin, *The Research Act A Theoretical Introduction to Sociological Methods* (Routledge, 2009), 81.

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staff (N=47) were conducted to find out the goals and direction of the transformation after reviewing the important published documents. Direct observations were also carried out to see facts on the ground and reveal the impact of changes in personal and organizational behavior. To complete the data, some of the required information was also checked through the university's website which had previously been permitted because the information content could be accessed openly. Detailed participant information as shown in Table 1.

Tabel 1

Sampel of study

University	Gender	Job Position					N	%
		Rector	Dean/ Deputy	Head of Study program	Lecturer	Admin. staff		
UIN SK	Male	1	2	2	2	1	8	17,02
	Female	0	1	1	1	1	4	8,51
UIN MALIKI	Male	1	2	2	2	1	8	17,02
	Female	0	1	1	1	1	4	8,51
UIN SA	Male	1	1	2	1	1	6	12,77
	Female	0	2	1	1	1	5	10,64
UIN WS	Male	1	2	2	2	1	8	17,02
	Female	0	1	1	1	1	4	8,51
N		**4**	**12**	**12**	**11**	**8**	**47**	**100,00**
%		**8,51**	**25,53**	**25,53**	**23,40**	**17,02**	**100,00**	

The data collected was analyzed by a holistic analysis model[36] and also following the three steps suggested by Huberman and Miles: data reduction, data display, and data verification.[37] All data are described, then sorted by

[36] Creswell, *Qualitative Inquiry and Research Design : Choosing among Five Approaches*, 100, 191; Robert K Yin, *Case Study Reserach: Design and Methods*, Fifth edit (California: Sage Publication Inc, 2014), https://edisciplinas.usp.br/pluginfile.php/1742025/mod_resource/content/1.

[37] Huberman and Miles, *Qualitative Data Analysis* (Berverly Hills California: Sage Publication Inc, 1984), 21–23.

categorizing key issues or analyzing themes according to research objectives. The theme is then analyzed by means of interpretation to find the essence of the existing phenomenon through the triangulation process. The final data is presented in depth through narrative and can be clarified with tables and figures.

IV. Results

IV.1. Shifting scientific paradigm at UIN in Indonesia

The main finding of this study is that there is a shift in the scientific paradigm at UIN in Indonesia with the integrated science model as a new paradigm. Even though there is a role for state policy factors, the process of shifting is more influenced by internal factors regarding the need for a new scientific model that must be used by a university. The following are university profiles as shown in Table 2 below:

Table 2

University profile

Aspect	UIN SK	UIN MALIKI	UIN SA	UIN WS
Status	State University	State University	State University	State University
Established	1950	1961	1961	1970
UIN status change	2004	2004	2013	2014
Legality: Decree President RI	No. 50 of 2004	No. 50 of 2004	No. 65 of 2013	No. 130 of 2014
Faculty before UIN	Tarbiyah, Syariah, Dakwah and Ushuluddin	Tarbiyah, Syariah, Dakwah and Ushuluddin	Tarbiyah, Syariah, Dakwah and Ushuluddin	Tarbiyah, Syariah, Dakwah and Ushuluddin
New Vision	Excellence and Leading in the Integration and Development of Islam and Science for Civilization.	The realization of an integrative HE in combining science and Islam with an international reputation.	To become an excellent and competitive international Islamic University	Leading Research Islamic University Based on Unity of Science for Humanity and Civilization in 2038

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Aspect	UIN SK	UIN MALIKI	UIN SA	UIN WS
Number of Faculties after become univesity	9 Faculties : – Adab and Cultural Studies – Da'wah and Communication – Sharia and Law, – Tarbiyah and Teacher Training, – Ushuluddin and Islamic Thought, – Science and Technology, – Social Sciences and Humanities – Islamic Economics and Business. – Post Graduate (Master and doctoral)	8 Faculties: – Tarbiyah and Teacher Training – Sharia, – Humanities, – Economics, – Psychology – Science and Technology, – Medicine and health Sciences. health – postgraduate (master dan doctoral level)	10 Faculties: – Tarbiyah and Teacher Training, – Da'wah and Communication – Sharia and Law, – Ushluddin and Philosophy, – Economics and Islamic Business, – Social and Political Sciences, – Psychology and Health, – Science and Technology – Adab and Humanities – Postgraduate programs.	9 Faculties: – Da'wah and Communication, – Sharia and Law, – Tarbiyah and Teacher Training – Ushluddin and Humanities – Economics and Islamic Business, – Social and Political Sciences, – Psychology and Health, – Science and Technology, – Postgraduate program
Number of study programs	41	43	56	47

The table confirms that the change in status to become a new university occurred in 2003/2004 and 2013/2014. This shows that changes to the institutional organization and scientific paradigm require a long period of up to half a century. It is known that these universities were founded in the 1950s, or the early years of the Republic of Indonesia's independence, 1945.

From the perspective of the evolution of science by Thomas S Kuhn, the period of 50 years can be called a period of normality, where they both have the status of institutes and during that time the university focuses on mono scientific discipline, namely the Islamic studies such as *Tarbiyah* (Islamic education), *Syariah* (Islamic law), *Da'wah* (Islamic communication), and *Ushuluddin* (Fundamentals of Islamic Studies). The period in which they were very proud and comfortable to be called an Islamic religious of HE (PTAI). Indonesian people are also very familiar with the names IAIN or STAIN.

Why change the status to university and shift the scientific paradigm to IOS? This is the main question in our investigation. This study found that there are external and internal factors that influence. Externally, changing the status of HE institutions and the importance of IOS is a state policy mandated

by the President of the Republic of Indonesia, Joko Widodo. It is known that the change in status from IAIN to UIN in several state Islamic universities in Indonesia was based on a presidential decree as shown in the table. However, the difference in the time when the presidential decree was issued shows that the government did not immediately change the status of the university.

The decision is based on the internal readiness of each internal institution toward transformation. Previously the government of Indonesia selected and evaluated the internal readiness of universities based on existing conditions, plans for change, the science integration model used, and certain unique characteristics.

This can be read from the proposal documents for the transformation into UIN from each tertiary institution and the report documents for activity agendas in the stages of changing status which can take up to five to ten years. The existence of direct state involvement as a reinforcing factor and trigger for institutional transformation and the importance of IOS is an important finding of this research.

Internally, changes in the status become universities are influenced by a new scientific awareness that must be developed by Islamic HE institutions in Indonesia. This is possible if the status becomes a university. Because, in the HE system in Indonesia, universities have the authority to conduct multi-disciplinary studies, and institutes are limited to one discipline, namely only the religious sciences. While the IOS is only possible to develop if multi-disciplinary authority is obtained.

In several primary documents such as the proposal for transformation into UIN and the UIN profile document, their reasons can be identified as a new awareness of the importance of IOS which must be used to develop or replace old scientific paradigms both in a philosophical and practical scope. Several works by professors and rectors at each UIN, both in the form of books and conference papers that sparked the theme and concept of IOS, also played an important role in creating this new scientific awareness.

These reasons from the perspective of the evolution of science can be interpreted as anomalies and crises. Table 3 below identifies a scientific paradigm shift based on scientific integration at UIN in Indonesia following Kuhn's theory:

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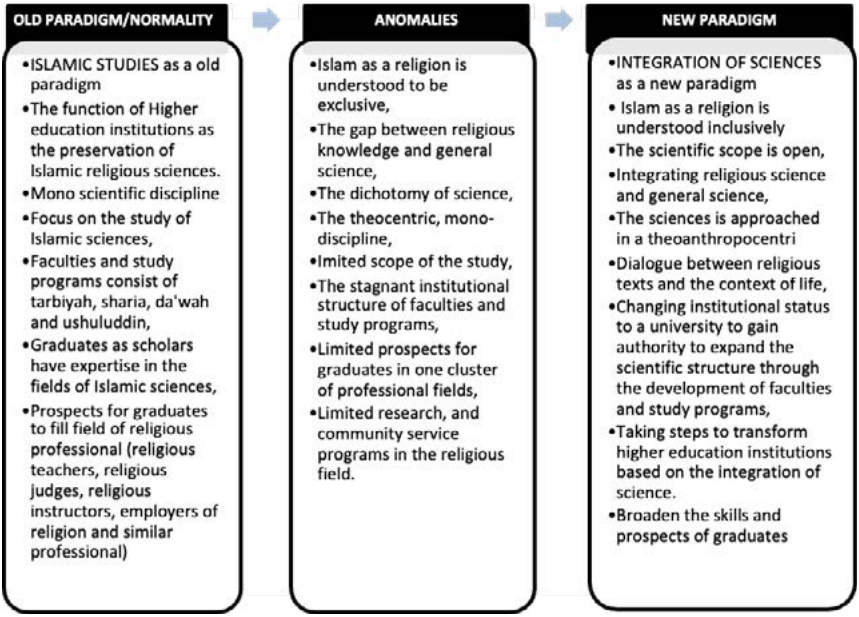
Table 3

Shifting of the scientific paradigm at UIN in Indonesia



Internal universities must immediately stop and implement revolutionary modifications in order to stop the accumulation of the anomalies in the table above. The change in status to become a university is a revolutionary step that was fought for because it relates to the authority held by the state. Perhaps this is a unique case study in that state policy factors are very dominant in the process of shifting the scientifical paradigm. The state responds and provides strong support for the aspirations of university scientists and establishes it as a state policy.

Furthermore, new normal steps were taken by UINs in Indonesia to transform their institutions to adapt to IOS as their new scientific paradigm. This study identified them as:

1. Changes in university structure;
2. Adding and merging faculties and study programs;
3. Changes to the university's vision, mission, and logo
4. Changes in the structure of the curriculum;
5. Changes in policy on research and community service programs;

6. Completing HE supporting infrastructure to support the scientific integration process;
7. Recruitment of lecturers and education staff to meet the needs according to the qualifications of the new study program;
8. Strengthening the scientific capacity of lecturers according to the new paradigm
9. Improvement of institutional management.

IV.2. New scientific paradigm models at UIN in Indonesia

The IOS as a new scientific paradigm at UINs in Indonesia uses different models, both in the choice of terms, metamorphic symbols, and logos that are applied. Even though the IOS has become their new scientific mainstream, its applications have their uniqueness. This shows that the transformation carried out is autonomous. University internal factors such as the origin of the concept of thinking about IOS, influential scientists, and the terms and symbols used are original from the local university which are then agreed upon and determined as a university decision. The difference in models is as shown in Table 4 below:

Table 4

Models of integration of sciences as new paradigm at UINs in Indonesia

	Model/Term	Metaphorical Symbol	Influential Scientists	Logo
UIN SK	Integration-interconnection of science (IIOS)	The Spider Webs	Prof. Amin Abdullah	Figure 1
UIN MALIKI	*Tarbiyah Ulul Albab* (TUA)	The Tree of Science	Prof. Imam Suprayogo	Figure 2
UIN SA	Integration of Science (IOS)	the Twin Towers	Prof. Nur syam, Prof. Abul A'la	Figure 3
UIN WS	*Wahdatul Ulum*/Unity of Science (UOS)	The Diamond	Prof. Qadry A Azizy, Prof. Abdurrahman Mas'ud	Figure 4

UIN SK uses the IIOS model with the symbols 'Jaring Laba-laba' *(The Spider Webs)* has the view that conducting studies on religious sciences and general sciences will open intensive dialogue between humanity *(hadlarah*

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an-nas), science *(hadlarah al-ilm)*, and philosophy *(hadlarah al-falsafah)*. With this paradigm, UIN SUKA needs to emphasize its concern for the development of Muslims in particular and society in general. Fields of science that were rare before can be integrated to gain an understanding of Islam that is friendly and democratic and by the Islamic vision of mercy to all the worlds *(Rahmatan lil Alamin)*.

Professor Amin Abdullah's thoughts, as can be read from his various works,[38] greatly influenced the process of transforming UIN SUKA and shifting its scientific paradigm. Apart from being an Indonesian Muslim scientist, he also served as Rector when the campus changed its status. The concept of IOS with the term IIOS with the symbol 'the spider Webs' is officially used by the university as a new scientific paradigm and a reference for the transformation process. The spider's web describes a scientific construction that is 'theoanthropocentric-integralistic', broad-minded and develops skills in every aspect of life in the era of globalization. This model aspires to produce skilled Muslims, able to solve humanitarian and religious problems in the modern and postmodern eras with a new approach through integrated and interrelated contemporary natural sciences, social sciences, and humanities. IIOS is operationalized through methods that represent all scientific entities, including humanity, philosophy, and science itself. Graduates are expected to become 'Madani' (citizenship) with a family character and an advanced culture.

UIN Maliki establishes a new scientific paradigm with the term 'Tarbiyah Ulul Albab' with the symbol 'Tree of Knowledge' (Knowledge Tree). This paradigm is a universal integration of the new scientific structure of UIN Maliki to become an integrative Islamic educational institution while still having strong Islamic characteristics like a tree with strong trunks and roots. This concept was developed by Professor Imam Suprayogo who is the Rector of this university.

Through his works, it can be understood that the symbol of a tree with strong roots is a science tool that every student must master well including Arabic and English, logic, introduction to science, and social studies. The strong tree trunk depicts the study of the sources of Islamic teachings, namely the Al-Qur'an and hadith, Islamic thought, and Islamic history.

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[38] M. Amin Abdullah, *Islamic Studies: Normativity or Historicity?* [in Indonesian] (Yogyakarta: Pustaka Pelajar, 2001); M. Amin Abdullah, *Islamic Studies in Higher Education: Integrative-Interconnective Approach*, [in Indonesian] 1st ed. (Yogyakarta: Pustaka Pelajar, 2006); M. Amin Abdullah, "Religion, Science and Culture: An Integrated, Interconnected Paradigm of Science," *Al-Jami'ah* 52, no. 1 (2014): 175–203, https://doi.org/10.14421/ajis.2014.521.175-203.

While the many branches of the tree are used to explain several general sciences with their various branches, such as natural sciences, social sciences, and humanities. Each part of the tree has a different role but unites to produce fruit that will be used for human life. Thus, every student who studies science, with good language skills, and understands social sciences, and philosophy will be used as a tool to explore sources of sciences, both in the form of 'Qouliyah' (doctrinal) verses and 'Kauniyah' (reality).

With the Twin Towers approach, UIN SA constructs a new scientific paradigm implementing IOS. The goal of this model is to achieve a balanced value with a link between both of them. Three integration pillars in both towers serve as a gradual plan for success, namely: 1) bolstering Islamic science as a whole; 2) integrating social science and the humanities with Islamic science; and 3) emphasizing science and technology alongside Islamic science.

The integrated twin tower model is based on the idea that academic integration between Islamic sciences, social-humanities, and general sciences and technology develops according to the characters and objects they have, but can greet each other, meet and get along with each other in connected growth. UIN SA firmly stated that the integrated twin towers operate not for the Islamization of science, but for the Islamization of reason to create a scientific system that complements each other between the Islamic sciences, social humanities, general science and technology.

Meanwhile, UIN WS is building a new scientific paradigm with the term 'Wahdatul Ulum' (Unity of Sciences). This paradigm emphasizes that all knowledge is a unity that originates from and leads to God, Allah through His revelations either directly or indirectly. For that, all sciences must dialogue with each other and focus on one goal to bring its essence to know and draw closer to God as 'al-Alim' (God Who Knows All). The UOS is expected to produce encyclopedic scientists, who master many sciences and have the view that all branches of science are a holistic unit and are capable of dialogue. To achieve this paradigm, UIN WS uses the principles of integration, collaboration, dialectic, prospective, and pluralistic. The three strategic models used include: 1) humanization of Islamic sciences, 2) spiritualization of modern sciences, and 3) revitalization of local wisdom.

UIN WS symbolizes the paradigm of UOS with 'Diamond' which means very beautiful, of high value, emits light, and has interconnected axes and sides. Five scientific clusters were developed including: 1) religion and human sciences, consisting of Islamic sciences, art, history, languages, and philosophy; 2) social sciences consisting of sociology, economics, geography, politics, and psychology; 3) natural sciences consisting of chemistry,

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physics, aerospace, and geology; 4) arithmetic and computing consisting of computers, logic, mathematics, and statistics; and 5) professions and applied sciences, including agriculture, architecture, business, law, management, and education.

IV.3. New logo at UIN in Indonesia

A new scientific paradigm shift in every UIN in Indonesia, apart from being followed by a new vision as shown in Table 2, there is also a change in the university logo as a new identity that is adapted to each scientific paradigm as illustrated below:

JARING LABA-LABA / SPIDER WEBS
Interconnection-integration paradigm of science at UIN Sunan Kalijaga Yogyakarta

STATE ISLAMIC UNIVERSITY
SUNAN KALIJAGA
YOGYAKARTA

NEW LOGO
UIN Sunan Kalijaga Yogjakarta

Figure 1
Symbol of the scientific paradigm and the logo of UIN SK

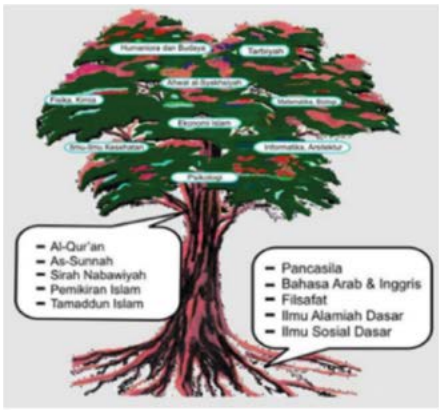
UIN SK has used this new logo since 2010.[39] The basic shape is a sunflower with one petal and two leaves. Flower petals are depicted with classical Islamic ornament. The left leaf blade visualizes the letter 'U', the stem 'I', and the right leaf 'N' so that it can be read as UIN. Flowers symbolize beauty, fragrance, harmony, balance, and kindness. Allah loves beauty and fragrance and Allah is the most beautiful and fragrant God. That is, they are carries the mission of coolness and beauty of the surrounding

[39] UIN Sunan Kalijaga, "University Symbol and Logo," [in Indonesian] 2010, https://uin-suka.ac.id/id/page/universitas/62.

environment as well as a fragrance in carrying out all its roles and instilling a human spirit and character of 'Rahmatan Lil 'Alamin' (grace to all). The yellow color which is synonymous with gold denotes luxury, honor, nobility, immortality, loyalty, and devotion. Luxury and wealth are realized through the depth of knowledge, rich character, self-maturity, and local cultural wisdom. UIN SK wants to excel but remains polite and humble. While the green color on the leaves symbolizes continuity, freshness, naturalness, and renewal. Green is a symbol of hope, growth, birth, prosperity, fertility, and regeneration through innovation, transformation, and sustainability.

The symbol a floral motif is described as resembling a spider's web, which means that there is a connection between science and religion. The icon was taken from the wall ornaments of the Alhambra Palace during the Umayyad Caliphate. In Granada, Spain which has a blend of artistic motifs between Eastern and Western civilizations. That is, the new vision and mission want to eliminate the scientific dichotomy towards integration and interconnection of various scientific disciplines to achieve civilizational excellence.

UIN MALIKI made a new logo symbolized by the domination of the words 'Ulul Albab'[40] as below:



POHON ILMU /TREE OF SCIENCE
Scientific Paradigm at UIN Maulana Malik Ibrahim Malang

NEW LOGO
UIN Maulana Malik Ibrahim Malang

Figure 2

Symbol of the scientific paradigm and the logo of UIN MALIKI

[40] UIN Maulana Malik Ibrahim, "Symbol," [in Indonesian] 2021, https://fkik.uin-malang.ac.id/index.php/lambag/.

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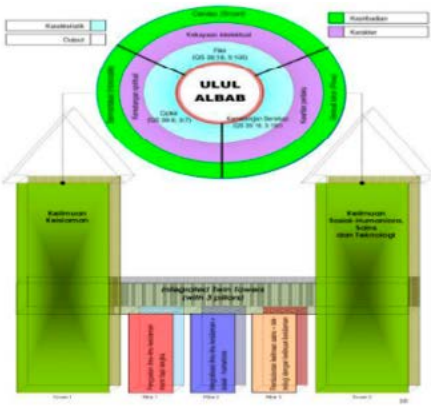
The shape of the logo is five sides with a dominant green color with the Arabic word 'Ulul Albab' in yellow. According to its meaning, this word symbolizes the commitment of the UIN Maliki academic community to become scholars who always obey and remember Allah *(al Dzikr)*, humans who always think *(al Fikr)*, and humans who always do good. The yellow color on the Ulul Albab writing symbolizes the spirit of struggle *(Jihad)* in studying and developing it to give birth to experts in science *(Mujtahid)*. The green base color symbolizes the attitude of always prioritizing trust, honesty, and peace. The five-sided image symbolizes the understanding and practice of the 5 pillars of Islam as a whole, broadly, and deeply.

To realize this goal, operationally, UIN Maliki requires the importance of 'pesantren' of university (Islamic boarding University) which is supported by academic support institutions and other technical implementing institutions in an integral way. The university also formulates the pillars of HE *(Arkanul Jami'ah)* consisting of lecturers, mosques, ma'had al Jamiah/ Pesantren of University, libraries, laboratories, lecture halls, offices, arts and sports development centers, and broad and strong sources of funding. With operational implementation like this, it is hoped that the fruit of integration will be humans who have the competence of faith, good deeds, and morals.



MENARA KEMBAR / TWIN TOWERS
Scientitic Paradigm at UIN Sunan Ampel Surabaya

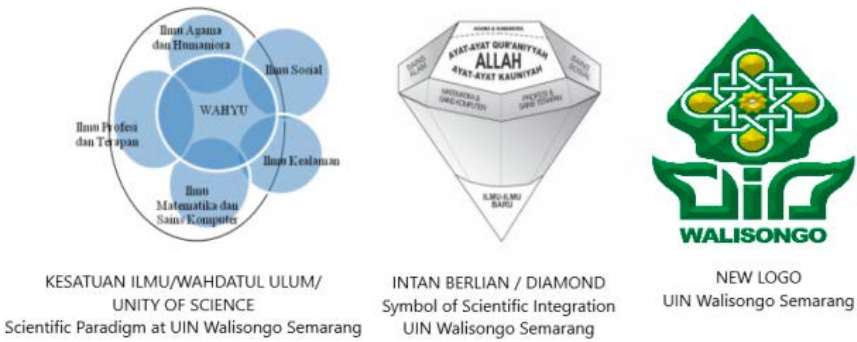
NEW LOGO
UIN Sunan Ampel Surabaya

Figure 3

Symbol of the scientific paradigm and the logo of UIN SA

The new logo of UIN SA below is visualized with a symbol in the shape of a box with nine corners. the number of angles represents 'Walisongo' as Muslim Founding fathers of Islam in 'Nusantara' (the archipelago), which consists of nine figures. Knitting and ties by forming nine interrelated corners is a symbol of 'Bhineka Tunggal Ika', the Indonesian national philosophy that shows harmony in diversity. The golden yellow Twin Towers symbol represents IOS, indicating that this integration will bring glory. The green color which means life is the basic color of the University's identity.[41]

UIN WS followed up on the 'Unity of Science's new scientific paradigm with a new logo that depicts a lantern as a symbol of science that illuminates life.The lantern's function demonstrates UIN WS's implementation of the "Tri Dharma," Indonesia's three primary HE functions of education and teaching, research, and community service.[42]



KESATUAN ILMU/WAHDATUL ULUM/
UNITY OF SCIENCE
Scientific Paradigm at UIN Walisongo Semarang

INTAN BERLIAN / DIAMOND
Symbol of Scientific Integration
UIN Walisongo Semarang

NEW LOGO
UIN Walisongo Semarang

Figure 4

Symbol of the scientific paradigm and the logo of UIN WS

This logo consists of several elements. First, 'Gunungan' is one of the properties in 'Wayang'. Wayang is a traditional Indonesian performing art of Javanese culture that has been designated by UNESCO as a World Heritage Masterpiece in the Art of Speech and an Intangible Heritage of Humanity. It is shape tapers upwards like a mountain peak. Gunungan was created by Sunan Kalijogo, one of the 'Walisongo' (9 Muslims Founding Fathers at Nusantara) in 1521 AD. The 'Gunungan' here is a symbol that UIN WS's

[41] UIN Sunan Ampel, "Sunan Ampel University Symbol," [in Indonesian] 2021, https://w3.uinsby.ac.id/logo/.

[42] UIN Walisongo, "Meaning of Logo," [in Indonesian] 2021, https://walisongo.ac.id/?page_id=4371.

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mission is to explore, develop, and apply local wisdom. Gunungan also contains spiritual meaning. In the wayang tradition, gunungan, or often also "Kelir" is synonymous with the shape of a mosque's crown symbolizing the unity of God, humanity, and the universe.

Second, the five sides of the logo represent the five principles of "Pancasila," the Indonesian state's philosophy and foundation. Third, the four vertices' geometry. The 'Nusantara (archipelago's) classical Islamic art is represented by this geometry, which has four intersecting and integrated segments. Its meaning represents the four primary aspects of UIN WS's development: theoanthropocentric, Islamic sciences being made more human, modern science's spiritualization, and the revival of indigenous wisdom. Fourthly, the five yellow spaces represent the Islamic pillars; Fifth, the number of reform committees in Java, represented by the nine stars,In a variety of fields, including religion, culture and art, health, agriculture, and social affairs, they carry out ijtihad with complete wisdom; Sixth, the axis of God Almighty is depicted by the white dot in the middle. Seventh, an open book represents a scientific foundation and a determination to become an Islamic research university for the benefit of Islam, science, and society; and eighth, 'Walisongo' writing as the university's name.

UIN WS currently carries out the following mission in accordance with the meaning of the symbol:

1. Organizing science and technology education and teaching so that professional graduates with alkarimah character are produced based on the unity of science;
2. Improving the quality of research for the benefit of Islam, science, and society;
3. Putting together useful services for community development;
4. Examining, developing, and putting into practice the values of local wisdom;
5. Developing cooperation with a variety of institutions on a regional, national, and national scale that adhere to international standards; and
6. Realizing the management of professional institutions of international standards.

V. Discussions

From the description of the research results above, five aspects can be studied as good practices to advance and achieve university excellence based on the experience of UINs in Indonesia.

First, state contribution. Through a presidential decree with two objectives, namely institutional THE and IOS, Indonesia changed its institutional status to a university based on national policy. Even though this aspect does not determine the THE organizations, it has become a very influencing fact, a triggering force, mandate of authority, and certainty of legal status for universities whose management is regulated by the state by the established HE system. The alignment and involvement of the state are important to ensure the responsibility and support of the government in fulfilling every citizen's right to education in an effective way to achieve the goal of providing quality HE.[43]

This finding reinforces Stephen J. Ball's theory of education policy and social class[44] and adds to Ivonaldo Leite's list of alternative studies on the importance of public policy innovation.[45] Here also shows the awareness that HE has a role as an instrument to improve the quality of human resources and the country's competitiveness at the world level. State policy here requires that the THEs means giving HE roles and functions more broadly, not limited to one scientific discipline and it is necessary to strengthen autonomous scientific principles for each university. Thus, every policy on changing institutional status must have an impact on opportunities for transformation, expansion, and massification of the functions of HE.[46]

Second, the reasons and process for shifting the scientific paradigm for THE. The existence of a new scientific paradigm at universities based on the integration of different variations of science at each UIN in Indonesia is an important experience in the THE institutions. The dichotomy of science, institutional stagnation in developing scientific autonomy, and limitations in expanding university functions are identified anomalies and have prompted new awareness about the importance of shifting the old scientific paradigm used.

This experience further strengthens Thomas S Kuhn's theory about the need for a scientific revolution: that the old paradigm can shift to a new

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[43] Ivar Bleiklie and Maurice Kogan, *Transforming Higher Education*, ed. Maurice Kogan et al., *Transforming Higher Education: A Comparative Study*, vol. 13, Higher Education Dynamics (Dordrecht: Springer Netherlands, 2006), https://doi.org/10.1007/978-1-4020-4657-5.

[44] Stephen J Ball, *Education Policy and Social Class* (London and Newyork: Routledge : Taylor & Francis Group, 2006).

[45] Ivonaldo Leite, "Society, Public Policies and Education: Alternative Approaches in Uruguay," *Journal for Critical Education Policy Studies* 18, no. 1 (2020): 136–63, http://www.jceps.com/archives/8227.

[46] Philip G Altbach, Liz Reisberg, and Laura E Rumbley, "Trends in Global Higher Education : Tracking an Academic Revolution Trends in Global Higher Education. A Report Prepared for the UNESCO 2009 World Conference on Higher Education," *Unesco*, 2009, 22, http://unesdoc.unesco.org/images/0018/001832/183219e.pdf.

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paradigm in the presence of harmful anomalies.[47] Thus, it can be understood that the THE requires new awareness through internal university consensus through the open-mindedness of scientists and their institutional policies. Transformation requires a philosophical review and the formation of a new scientific paradigm that is set to improve the static and stagnant situation experienced by many universities.

This research also identified that the choice to integrate science as a new paradigm or new normal was greatly influenced by thoughts produced by local scientists at each UIN which had long been disseminated through various works and forums before changes in status and new scientific paradigm changes occurred. Professors who also act as university leaders have previously influenced IOS-based scientific discourse, such as Prof. Amin Abdullah at UIN SK, Prof. Imam Suprayogo at UIN Maliki, and prof. Abul A'la at UIN SA, Prof. Qodry A Azizy and Prof. Abdurrahman Mas'ud at UIN WS. Although dialectically, their scientific genealogy is also heavily influenced by the thoughts of scientists outside Indonesia because they are alumni of Western universities. they study with Western scientists in developing IOS scientific discourse and methodology and aspire to be accommodated in Indonesia.

However, the shift in the scientific paradigm at the university cannot be personalized by individual roles. The new paradigm shift is determined institutionally. The process of transferring IOS as a new paradigm that is appropriate will affect the success of implementing the current UIN. This could mean according to the study of Bazana et al., that the transformation is determined by the transfer process.[48] We consider that the change in the scientific paradigm that occurs at UIN in Indonesia is a dialectical process. We understand it as a modification, not a scientific revolution. This may differ from Thomas S Kuhn's theory which states that a new paradigm shift does not have to be accompanied by anomalies and crises. But it could be because of new interpretations, new needs, and anticipated improvements for the future.

Third, IOS as a new scientific paradigm. As explained earlier, IOS is one of the main goals of Indonesia's national education policy in changing the status of several Islamic religious colleges into universities. Integration was chosen as an effort to achieve HE excellence. Here, we can understand that

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[47] Kuhn, *The Structure of Scientific Revolutions*.

[48] Sandiso Bazana, Logan McLaren, and Trust Kabungaidze, "Transforming While Transferring: An Exploratory Study of How Transferability of Skills Is Key in the Transformation of Higher Education," *Transformation in Higher Education* 3 (July 26, 2018): 1–14, https://doi.org/10.4102/the.v3i0.35.

there is a mutual relationship between THE and IOS. Both are not only to the needs of the Indonesian state but also respond to the university's internal aspirations and expectations to develop knowledge and services more broadly. The institutional status of IAIN is an obstacle because it is only authorized in one cluster of Islamic disciplines. So it is important across contexts and disciplines. Internally, IOS is a solution to restore long-lost scientific traditions and an answer to criticism of the practice of science dichotomy.

Restoration is based on theological and historical reasons. Islamic theology has a strong doctrine about the importance of unity, balance, and harmony (read Al-Qur'an surah al 'Alaq 1-5; al-Tahrim: 6; al MujJadilah: 11, al Nahl: 43, Al Taubat: 22 and others). Islam also emphasizes 'Rahmatan lil Alamin' (religion of mercy to the whole nature/world). While dichotomous practices are often found internally in Muslim society, including in the development of knowledge in Islamic educational institutions. Historically, IOS is also an agenda that has long been coveted by Muslim scientists in the world to restore scientific practice in the 7-11th centuries AD which succeeded in building world civilization with the presence of multidisciplinary Muslim scientists. Thus IOS as a new scientific paradigm at Islamic universities in Indonesia is a continuation of the project of Islamization of knowledge that has been initiated by some of the great Islamic reformers in the Western world since the 1950s which is currently becoming a real action at Islamic Universities in Indonesia.

Even though it is the case in Indonesia, this experience can inspire a world view that quality HE services can give hope for community revival and an increase in people's living standards. The assertiveness of the state is a positive response because it opens up the authority to expand scientific disciplines according to the university's internal aspirations as well as world thoughts. Thus, the THE based IOS shows collaboration between state policies, the role of scientists, and the aspirations of HE institutions.

Fourth, the practice of shifting scientific paradigms for THE. This study shows the practice of shifting scientific paradigms in the THE process by forming a new scientific paradigm followed by operational steps in both academic and non-academic aspects. Based on the documents we examined, the implementation involves steps including:

1. Formulate a new scientific paradigm that will be used, including concepts, principles, and strategies;
2. Establish new values for HE;
3. Change the old vision and mission by formulating a new vision and mission;

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4. Create and design a new university logo; and
5. Revise and implement academic and non-academic programs based on new scientific paradigm.

Formulating a new scientific paradigm, including concepts, principles, and strategies, is an essential initial step as a directional guide for the transformation process and the next steps. All subsequent practice steps refer to the new paradigm. This step can complement the proposed conceptual framework for university transformation recommended by Shariffuddin et al., which only involves aspects of academic identity, academic career, and academic activity in the transformation process.[49] Each university institution can produce products and models of different scientific paradigms, but in the same view and frame as the IOS paradigm as happened in Indonesia. Therefore, creativity, innovation, and formulation can influence this step.

Meanwhile, updates to the vision and mission, cultural values, and university logo follow the agreed formulation of a new scientific paradigm. Changes in these aspects represent the desire for the importance of a new identity, new needs, and the spirit of a new movement. This step strengthens the theory formulated by Mezirow et al., which offers 10 phases of transformation.[50] The resulting impact will go through a long dialectical process in improving performance towards excellence performance.

In the implementation step of the academic aspect, this research experience shows that the transformation has expanded faculties and study programs through additions or mergers. The impact of the change to a university at UIN in Indonesia is a massive increase in the number of faculties and study programs by opening new faculties and study programs and incorporating new general sciences into existing faculty clusters or study programs. For example, the merger of the Tarbiyah faculty into the Tarbiyah and Teacher Training Faculty, the Ushuluddin faculty into Ushuluddin and

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[49] Sara Asmawati Shariffuddin and Jamal Rizal Razali, "Transformation of University Colleges to Full-Pledged Universities: A Proposed Conceptual Framework for Malaysian Higher Learning Institutions," *International Journal of ADVANCED AND APPLIED SCIENCES* 4, no. 12 (December 2017): 168–73, https://doi.org/10.21833/ijaas.2017.012.030.

[50] Mezirow, "Learning to Think Like an Adult : Core Concepts of Transformation Theory"; Colleen Aalsburg Wiessner et al., "Transformative Learning in Action: Building Bridges Across Contexts and Disciplines," in *International Transformative Learning Conference*, ed. Colleen Aalsburg Wiessner et al. (New York: teacher College Columbia University, 2003), https://storage.ning.com/topology/rest/1.0/file/get/2865643287?profile=original; Colleen Aalsburg Wiessner, Jack D Mezirow, and C. A. Smith, "Theory Building and the Search for Common Ground," in *Learning as Transformation: Critical Perspectives on a Theory in Progress*, ed. Jack D Mezirow (San Francisco: Jossey-Bass, 2000), 329–58.

Humanities, and the Da'wah (Islamic communication) faculty become the faculty of Da'wah and Communication Sciences, the Faculty of Economics and Islamic Business, as well as the faculty of sharia and law. Additions occurred in the faculty of science and technology, medicine, arts, and Islamic architecture. Additions and mergers are free to make according to needs and internal resources.

The IOS paradigm shift in this study opens up general scientific disciplines in existing faculties and religious studies programs and strengthens Islamic philosophy in general scientific disciplines. At the same time, the methodology of general scientific disciplines is expected to influence the methods in the Islamic scientific tradition that has been practiced so far. The addition of teaching fields to the Tarbiyah faculty, for example, is intended to strengthen educational discipline based on Islamic values and open up innovations that have yet to be studied and practiced internally in Islam so far. The result is an excellent education.

So that the IOS paradigm is applied appropriately, the curriculum structure is also reformulated. New courses are given to study programs considered dichotomies, such as adding hermeneutics and philosophy courses to the Islamic religious studies study program to strengthen the interpretation of Islamic teachings to benefit a more comprehensive understanding. Meanwhile, faculties and general science study programs must study the Al-Qur'an, Arabic, Hadith, and Sufism, which have been the basis of the Islamic scientific tradition. With this model, UIN hopes that there will be multidisciplinary and interdisciplinary science, dialogue, and harmonization between general science and Islamic science so that the integration of knowledge is operationally practiced in studies. Because so far, the sciences that have developed in the Islamic world and the Western world can influence each other because science crosses national and religious boundaries.

Fifth, the challenge of shifting the scientific paradigm. THE with a new scientific paradigm shift has complex challenges. The semi-structured interviews of this research show that in the early stages, many did not understand the intended new paradigm and the difficulty of building changes in values and new visions. Study of Othman et al.[51] supports this finding that a better evaluation is still needed in terms of the integration of academic aspects and is a major weakness factor. Therefore, this challenge demands an increase in university management performance.

[51] Azam Othman et al., "Islamic Integrated Education System Model in the Malay Archipelago: Implications for Educational Leadership," *Intellectual Discourse* 25, no. 1 (2017).

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This study also identifies challenges in creating behavior change, both personal and organizational. The new vision, values, and logo generated in this transformation certainly have implications for the importance of building the right personality brand and can change optimistic behavior and enthusiasm which is marked by increasing the competence of actors, strengthening loyalty, user satisfaction, and product quality through good management of lecturers and students. It is important here to follow the recommendations of Mitchell J. Moore's cycle pattern through the stages of change.[52] This new identity also requires the ability of HE management to be able to build a scientific structure according to the principle of scientific integration as a paradigm. Thus it will become a tertiary institution that has excellence in scientific disciplines, academic infrastructure, and scientific productivity.

Finally, we realized that perhaps the practice of shifting the scientific paradigm in the transformation process at UIN in Indonesia could be different from other countries. But the formulation of a new scientific paradigm, IOS as a choice of paradigms, models, and practical steps can be used and developed. It is necessary to be conscious of both the quality of tertiary institutions and the quality of human resources in the future since the scientific paradigm for tertiary institutions is changing and evolving dynamically.

VI. Conclusions

The excellence of HE can be the key to improving the quality of human resources in building global civilization and transforming university institutions is an important step that can be taken. Every HE has many ways and strategies to create change. Changes in institutional status can create new opportunities that are wider and have better impacts, especially in carrying out the functions of HE, but of course, have complex challenges.

HE transformation can be carried out simultaneously through changes in institutional status and shifting the scientific paradigm to a new paradigm that is considered more ideal. The IOS paradigm is a viable option. IOS is a scientific paradigm construction that unites and eliminates the dichotomy between religious sciences and general science that has been practiced for a long time in scientific traditions in the world. IOS seeks to bring together, dialogue, and harmonize scientific practices that have been dichotomous.

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[52] Mitchell J. Moore, "The Transtheoretical Model of the Stages of Change and the Phases of Transformative Learning: Comparing Two Theories of Transformational Change," *Journal of Transformative Education* 3, no. 4 (2005): 394–415, https://doi.org/10.1177/1541344605279386.

This paradigm has been chosen and practiced in Indonesia as a national education policy in the THE at UINs in Indonesia. This study concludes that the THE with an IOS paradigm has encouraged Islamic religious universities in Indonesia to be more capable of developing science in a multidisciplinary.

Implementation can be done through state policy and followed up by universities by formulating and establishing it as a model for a new scientific paradigm even with variations in terms, symbols, and steps that differ between universities. Still with the same values and framework to integrate science. Spiritualization of general sciences, humanization of Islamic sciences, and revitalization of local wisdom are the operating strategies. The next step can be carried out by establishing renewal in the aspects of vision, mission, academic cultural values, and logos and followed by practical operational aspects of academic and non-academic aspects, unit functions, and infrastructure.

The THE practice is followed by important steps to create a university brand. The socialization process is recommended to strengthen self-confidence and create expectations and a culture of working together. It is must also ensure a better impact on graduates and society. Strengthening the quality of institutions, developing faculties and study programs, formulating curricula and new research directions, strengthening the capacity of lecturers and education staff, and strengthening infrastructure support is an important agenda with a new scientific paradigm shift.

The shift in the scientific paradigm in this transformation has shown the impact of university progress, but several challenges must be evaluated such as better operational follow-up at the faculty and study program levels, curriculum reformulation, strengthening human resource capacity, and fulfillment of the required infrastructure. Changes in organizational behavior are also important things that need to be considered by the performance of HE management so that this transformation can be maximized. We recommend that these challenges be studied further to strengthen this research. Finally, the THE with the IOS paradigm is open, and dialectical, and is recommended to be continued by every HE institution in the world as a civilizing process so that science in its development does not look at cultural, civilizational, and religious barriers. Science is universal and its presence is for the advancement of all human civilization in the future.

Bibliography

Abdullah, M. Amin. *Islamic Studies: Normativity or Historicity?*. [In Indonesian.] Yogyakarta: Pustaka Pelajar, 2001.

Tuning Journal for Higher Education
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doi: https://doi.org/10.18543/tjhe.2483 • http://www.tuningjournal.org/

———. *Islamic Studies in Higher Education: Integrative-Interconnective Approach*. [In Indonesian.] 1st ed. Yogyakarta: Pustaka Pelajar, 2006.

———. "Religion, Science and Culture: An Integrated, Interconnected Paradigm of Science." *Al-Jami'ah* 52, no. 1 (2014): 175–203. https://doi.org/10.14421/ajis.2014.521.175-203.

Altbach, Philip G, Liz Reisberg, and Laura E Rumbley. "Trends in Global Higher Education : Tracking an Academic Revolution Trends in Global Higher Education. A Report Prepared for the UNESCO 2009 World Conference on Higher Education." *Unesco*, 2009, 22. http://unesdoc.unesco.org/images/0018/001832/183219e.pdf.

Anderson, Dean, and Linda Ackerman Anderson. *Beyond Change Management : Advanced Strategies for Today's Transformational Leaders*. San Francisco, CA: Jossey-Bass a Wiley Company, 2001.

Arsyad, Azhar. "Fir Integration and Interconnection of Science and Religion." [In Indonesian.] *HUNAFA: Jurnal Studia Islamika* 8, no. 1 (2011): 1. https://doi.org/10.24239/jsi.v8i1.82.1-25.

———. "Integration Tree and the Interconnectivity of Science and Religion." *Kalimah* 14, no. 2 (2016): 115. https://doi.org/10.21111/klm.v14i2.608.

Attas, Syed M. Naquib Al. *Islam and Secularism*. Kuala Lumpur: ABIM, 1978.

———. *Islam and The Philoshopy of Science*. Kuala Lumpur: ISTAC, 1989.

———. *Islam the Concept of Religion and The Foundation of Ethics and Morality*. Kuala Lumpur: Angkatan Belia Islam Malaysia (ABIM), 1976.

Ball, Stephen J. *Education Policy and Social Class*. London and Newyork: Routledge : Taylor & Francis Group, 2006.

Bazana, Sandiso, Logan McLaren, and Trust Kabungaidze. "Transforming While Transferring: An Exploratory Study of How Transferability of Skills Is Key in the Transformation of Higher Education." *Transformation in Higher Education* 3 (July 26, 2018): 1–14. https://doi.org/10.4102/the.v3i0.35.

Bengtsen, Søren S.E., and Ryan Evely Gildersleeve. *Transformation of the University : Hopeful Futures for Higher Education*. 1st ed. London: Routledge, 2022. https://doi.org/10.4324/9781003102922.

Bleiklie, Ivar, and Maurice Kogan. *Transforming Higher Education*. Edited by Maurice Kogan, Mary Henkel, Marianne Bauer, and Ivar Bleiklie. *Transforming Higher Education: A Comparative Study*. Vol. 13. Higher Education Dynamics. Dordrecht: Springer Netherlands, 2006. https://doi.org/10.1007/978-1-4020-4657-5.

Bogdan and Biklen. *Qualitatif Research for Education: An Introduction to Theory and Methods*. Boston: Aliyn and Bacon. Inc, 1998.

Boruszewski, Jarosław, and Krzysztof Nowak-Posadzy. "From Integration to Modelling. On a Neglected Function of the Methodology of Humanities." *Studia Metodologiczne* 39, no. March (2019): 253–96. https://doi.org/10.14746/sm.2019.39.10.

Creswell, John W. *Qualitative Inquiry and Research Design : Choosing among Five Approaches*. Edited by Vicki Knight. 3rd ed. london: Sage Publication Ltd., 2013.

Denzin, Norman K. *The Research Act A Theoretical Introduction to Sociological Methods*. Routledge, 2009.

Faruqi, Ismail Raji al. *Islamization of Knowledge: General Principles and Work Plan*. 2nd ed. Virginia, USA: International Institute of Islamic Thought (IIIT), 1981. https://www.muslim-library.com/dl/books/English_Islamization_of_Knowledge_General_Principles_and_Work_Plan.pdf.

Fazlurrahman. *Islam and Modernity*. Chicago: University of Chicago, 1982.

Holbrook, J Britt. "What Is Interdisciplinary Communication? Reflections on the Very Idea of Disciplinary Integration." *Synthese* 190, no. 11 (July 25, 2013): 1865–79. https://doi.org/10.1007/s11229-012-0179-7.

Huberman, and Miles. *Qualitative Data Analysis*. Berverly Hills California: Sage Publication Inc, 1984.

Hvidtfeldt, Rolf. "Interdisciplinarity as Hybrid Modeling." *Journal for General Philosophy of Science* 48, no. 1 (May 28, 2017): 35–57. http://www.jstor.org/stable/44697645.

Imershein, Allen W. "Organizational Change as a Paradigm Shift." *The Sociological Quarterly* 18, no. 1 (January 15, 1977): 33–43. https://doi.org/10.1111/j.1533-8525.1977.tb02160.x.

Kitcher, Philip. "Explanatory Unification." *Philosophy of Science* 48, no. 4 (May 28, 1981): 507–31. http://www.jstor.org/stable/186834.

Kuhn, Thomas S. *The Structure of Scientific Revolutions*. II. Chicago: The University of Chicago Press, 1970. https://doi.org/10.5840/philstudies196413082.

Leite, Ivonaldo. "Society, Public Policies and Education: Alternative Approaches in Uruguay." *Journal for Critical Education Policy Studies* 18, no. 1 (2020): 136–63. http://www.jceps.com/archives/8227.

Mahzar, Armahedi. "Science Integration and Religion : Models Dan Metodology." [In Indonesian.] In *Sciences Integration and Religion: Interpretation and Action*, edited by Zainal Abidin Bagir. Bandung: Mizan, 2005.

Mas'ud, Abdurrahman. *Initiating Nondichotomic Education*. [In Indonesian.] Yogyakarta: Gama Media, 2002.

.Paradigm of Humanist Islamic Education. [In Indonesian.] Jogjakarta: Ircisod, 2020.

———. *Towards a Humanist Islamic Paradigm*. [In Indonesian.] Jogjakarta: Gama Media, 2003.

Mermiri, Tina. *Beyond Experience: Culture, Consumer and Brand*. London: Nutmeg house, 2009.

Mezirow 1923-2014, Jack. *Education for Perspective Transformation : Women's Re-Entry Programs in Community Colleges*. New York : Center for Adult Education, Teachers College, Columbia University, 1978., 1978. https://search.library.wisc.edu/catalog/999504700102121.

Mezirow, Jack. "Learning to Think Like an Adult : Core Concepts of Transformation Theory." In *Learning as Transformation, Critical Prespective on a Theory in Progress*, edited by Jack Mezirow. San Francisco: Jossey-Bass, 2000.

Tuning Journal for Higher Education
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doi: https://doi.org/10.18543/tjhe.2483 • http://www.tuningjournal.org/

Ministry of education and culture of the Republic of Indonesia. "Indonesia Dictionary," [in Indonesian.] 2020. https://kbbi.kemdikbud.go.id/.

Ministry of Education and Culture of the Republic of Indonesia. "Higher Education Database," [in Indonesian.] Database of Higher Education in Numbers, 2022. https://pddikti.kemdikbud.go.id.

Ministry of Religious Affair of the Republic of Indonesia. "Number of Islamic Religious Higher Education," [in Indonesian.] Education Management Information System (EMIS), 2022. http://emispendis.kemenag.go.id/ptkidashboard/Kelembagaan/PTKIBerdasarkanStatusLembaga.

Moore, Mitchell J. "The Transtheoretical Model of the Stages of Change and the Phases of Transformative Learning: Comparing Two Theories of Transformational Change." *Journal of Transformative Education* 3, no. 4 (2005): 394–415. https://doi.org/10.1177/1541344605279386.

Muthohar, Ahmad. *Emancipatory Islamic Education Paradigm*. [In Indonesian.] Edited by Anni Rosydah. 1st ed. Semarang: Fatawa Publishing, 2022. http://repository.uinsi.ac.id/handle/123456789/2915.

Nasr, Syed Hossein. *An Introduction to Islamic Cosmological Doctrines*. Cambridge: Harvard University Press, 1964.

Islamic Science an Illustrated Study. London, 1976.

———. *Science and Civilization in Islam*. Cambridge: Harvard University Press, 1968.

Othman, Azam, Suhailah Hussien, Islamil Sheikh Ahmad, Adnan Abd Rasyid, and Mastura Badris. "Islamic Integrated Education System Model in the Malay Archipelago: Implications for Educational Leadership." *Intellectual Discourse* 25, no. 1 (2017).

Parpan, Ulyana. "Paradigm of Higher Education in Conditions of Integration Challenges." *Visnik Nacional'nogo Universitetu «Lvivska Politehnika». Seria: Uridicni Nauki* 2018, no. 889 (March 20, 2018): 30–36. https://doi.org/10.23939/law2018.889.030.

Pine, B. Joseph, and James H. Gilmore. "A Leader's Guide to Innovation in the Experience Economy." *Strategy and Leadership* 42, no. 1 (2014): 24–29. https://doi.org/10.1108/SL-09-2013-0073.

Pine, B Joseph. "How B2B Companies Create Economic Value by Designing Experiences and Transformations for Their Customers." *Strategy & Leadership* 43, no. 3 (January 1, 2015): 2–6. https://doi.org/10.1108/SL-03-2015-0018.

Preez, Petro Du, Shan Simmonds, and Anné Hendrik Verhoef. "Rethinking and Researching Transformation in Higher Education: A Meta-Study of South African Trends." *Transformation in Higher Education* 1, no. 1 (2016): 7. https://doi.org/10.4102/the.v1i1.2.

President of the Republic of Indonesia. "Presidential Regulation Number 40,41,42,43,44,45 of 2021 Concerning the Transformation of IAIN into UIN," [in Indonesian.] 2021. https://setkab.go.id/perpres-terbit-enam-iain-bertransformasi-jadi-uin/.

Rogers, Donna L. "A Paradigm Shift: Technology Integration for Higher Education in the New Millennium." *AACE Review (Formerly AACE Journal)* 1, no. 13 (2000): 19–33. https://www.learntechlib.org/p/8058.

Sardar, Ziauddin. *Intellectual Jihad: Formulating Parameters of Islamic Science*. [In Indonesian.] Edited by AE Priyono. Surabaya: Risalah Gusti, 1998.

Shariffuddin, Sara Asmawati, and Jamal Rizal Razali. "Transformation of University Colleges to Full-Pledged Universities: A Proposed Conceptual Framework for Malaysian Higher Learning Institutions." *International Journal of ADVANCED AND APPLIED SCIENCES* 4, no. 12 (December 2017): 168–73. https://doi.org/10.21833/ijaas.2017.012.030.

Simsek, Hasan, and Karen Seashore Louis. "Organizational Change as Paradigm Shift." *The Journal of Higher Education* 65, no. 6 (November 1, 1994): 670–95. https://doi.org/10.1080/00221546.1994.11774746.

Skorton, David, and Ashley Bear. *The Integration of the Humanities and Arts with Sciences, Engineering, and Medicine in Higher Education: Branches from the Same Tree*. Washington, DC: The National Academies Press, 2018. https://doi.org/10.17226/24988.

Suprayogo, Imam. *Paradigm of Islamic Scientific Development Perspective of UIN Malang*. [In Indonesian.] Malang: UIN-Maliki Press, 2006.

Suprayogo, Imam. "Building the Integration of Science and Religion: The Experience of UIN Malang." [In Indonesian.] In *Integration Sciences and Religion: Interpretation and Action*, edited by Zainal Abidin Bagir. Bandung: Mizan, 2005.

Tolliver, D., and E. Tisdell. "Engaging Spirituality in the Transformative Higher Education Classroom." In *New Directions for Adult and Continuing Education. Teaching for Change: Fostering Transformative Learning in the Classroom*, edited by Taylor Ellis, 19th ed. San Francisco, CA: Jossey-Bass, 2006.

UIN Maulana Malik Ibrahim. "Symbol," [in Indonesian.] 2021. https://fkik.uin-malang.ac.id/index.php/lambag/.

UIN Sunan Ampel. "Sunan Ampel University Symbol," [in Indonesian] 2021. https://w3.uinsby.ac.id/logo/.

UIN Sunan Kalijaga. "University Symbol and Logo," [in Indonesian] 2010. https://uin-suka.ac.id/id/page/universitas/62.

UIN Walisongo. "Meaning of Logo," [in Indonesian] 2021. https://walisongo.ac.id/?page_id=4371.

Wade, Gail Holland. "A Concept Analysis of Personal Transformation." *Journal of Advanced Nursing* 28, no. 4 (1998): 713–19. https://doi.org/10.1046/j.1365-2648.1998.00729.x.

Weick, Karl E. "Educational Organizations As." *Administrative Science Quarterly* 21, no. 1 (1976): 1–19. http://www.jstor.org/stable/2391875.

Wiessner, Colleen Aalsburg, Jack D. Mezirow, Victoria J. Marsick, Heyoung Ahn, Rachel Ciporen, Terry Maltbia, Susan R. Meyer, Krystina Pawlak, Nancy Lloyd NPfahl, and Sandra Hayes. "Transformative Learning in Action: Building Bridges Across Contexts and Disciplines." In *International Transformative*

Tuning Journal for Higher Education
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doi: https://doi.org/10.18543/tjhe.2483 • http://www.tuningjournal.org/

Learning Conference, edited by Colleen Aalsburg Wiessner, Susan R. Meyer, Nancy Lloyd l Pfha, and Peter G. Neaman. New York: teacher College Columbia University, 2003. https://storage.ning.com/topology/rest/1.0/file/get/2865643287?profile=original.

Wiessner, Colleen Aalsburg, Jack D Mezirow, and C. A. Smith. "Theory Building and the Search for Common Ground." In *Learning as Transformation: Critical Perspectives on a Theory in Progress*, edited by Jack D Mezirow. San Francisco: Jossey-Bass, 2000.

Yin, Robert K. *Case Study Reserach: Design and Methods*. Fifth edit. California: Sage Publication Inc, 2014. https://edisciplinas.usp.br/pluginfile.php/1742025/mod_resource/content/1.

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