

Integrative Educational Thought in Indonesia and Malaysia: A Comparative Study of M. Amin Abdullah and Osman Bakar

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Abstract. The discourse on integrative education in Islamic higher education has emerged as a response to the fragmentation of knowledge between religious sciences and general sciences. This study aims to analyze and compare the integrative educational thought of M. Amin Abdullah and Osman Bakar, particularly regarding their epistemological foundations, the relationship between revelation and reason, models of knowledge integration, and their implications for Islamic education in Indonesia and Malaysia. The study employs a qualitative approach using a comparative study of thought based on library research. The data were analyzed through qualitative content analysis and comparative analysis using categories including the sources and nature of knowledge, the relationship between revelation and reason, knowledge integration, educational objectives, and epistemological implications. The findings show that both thinkers share a critique of the fragmentation of knowledge, but they adopt different starting points. Amin Abdullah develops an integration-interconnection paradigm that emphasizes dialogical interconnectedness among disciplines and modes of reasoning, whereas Osman Bakar develops a tawhīdic epistemology that takes the unity of reality as the foundation for the unity of knowledge. The findings further demonstrate that integrative education comprises two complementary dimensions: horizontal integration through interdisciplinary connectivity and vertical integration through coherence among knowledge, reality, values, and transcendent purposes.

Keywords: *Integrative Educational Thought, M. Amin Abdullah, Osman Bakar.*

INTRODUCTION

Knowledge integration is an important epistemological issue in contemporary Islamic education. Its urgency is further intensified amid the tendency of knowledge to become increasingly fragmented into different disciplines. Such fragmentation becomes problematic when differentiation between disciplines develops into epistemological separation that produces a dichotomy between various domains of knowledge [1]. In the context of education, this issue raises a fundamental question concerning how knowledge derived from different intellectual traditions can be situated within a coherent relationship without eliminating the epistemological characteristics of each. Therefore, knowledge integration also concerns how relationships between different perspectives of knowledge can be constructed [2].

The institutional transformation from the State Islamic Institute (IAIN) into the State Islamic University (UIN) creates a space for encounters between Islamic sciences and general sciences. This transformation demands a change in the paradigm of knowledge. Various Islamic higher education institutions in Indonesia have developed integration patterns that connect the epistemological, ontological, and axiological dimensions of knowledge. The integration of knowledge in Indonesian Islamic higher education is still an intellectual process that continues to develop. This can be seen from the models of knowledge integration that do not fully emerge in a single uniform model.

A similar issue has also developed in Islamic higher education in Malaysia. A number of Islamic higher education institutions in Malaysia, particularly the International Islamic University Malaysia (IIUM), explicitly position knowledge integration as part of their academic identity. The implementation of this idea includes efforts to integrate Islamic values into various fields of modern knowledge. However, the practice of such integration also faces conceptual problems. A more fundamental issue concerns how knowledge originating from different epistemological traditions can be placed within a coherent relationship. This condition indicates that the issue of knowledge integration in Indonesia and Malaysia is fundamentally related to ways of understanding the structure of knowledge [3].

At the theoretical level, this issue leads to an epistemological question regarding “what is meant by the integration of knowledge?”. If integration is only understood as the combination of religious sciences and general sciences, integration risks stopping at the administrative level without touching upon fundamental

assumptions. The main issue is how the relationship between various scholarly perspectives can be constructed without eliminating the epistemological character of each. In the context of contemporary Islamic thought, this issue concerns the relationship between revelation, reason, empirical experience, and philosophical reflection. M. Amin Abdullah offers the integration-interconnection paradigm, which seeks to overcome the fragmentation of knowledge through dialogical and interdisciplinary relationships among various fields of knowledge[5]. Meanwhile, Osman Bakar develops a *tawhidic* epistemology that places the unity of knowledge within the framework of the unity of reality.

Although the integration of knowledge has been widely discussed in the context of Islamic education in Indonesia and Malaysia, previous studies have paid more attention to models of knowledge integration in higher education institutions. Studies that specifically compare the construction of the thought of two figures from Indonesia and Malaysia in establishing the epistemological foundations of integrative education remain relatively limited. In fact, M. Amin Abdullah and Osman Bakar both pay attention to the issue of the fragmentation of knowledge, but their thought develops through intellectual constructions with different backgrounds and emphases[5] [6]. Therefore, a comparative study is needed that not only identifies the similarities and differences in their thought, but also analyzes how each constructs the relationship between religion, knowledge, epistemology, and education.

Based on these issues, this study aims to analyze and compare the integrative educational thought of M. Amin Abdullah and Osman Bakar in the context of Indonesia and Malaysia. The research focuses on the epistemological foundations of their thought, the relationship between knowledge derived from revelation and knowledge obtained through reason and empirical experience, the concept of knowledge integration that they develop, and its implications for Islamic education. By placing the two figures within a comparative framework, this study is expected to demonstrate both the points of convergence and the distinctive features of the epistemological constructions underlying integrative educational thought in Indonesia and Malaysia.

METHODS

This study uses a qualitative approach with a comparative study of thought method to analyze the integrative educational ideas of M. Amin Abdullah from Indonesia and Osman Bakar from Malaysia. The qualitative approach was chosen because the research focuses on interpreting the epistemological arguments developed by the two figures. The comparative method is used to identify the conceptual characteristics of each body of thought in understanding the relationship between Islam, knowledge, and education [7].

The research data are sourced from a literature study (library research). The primary sources of the research consist of the major works of M. Amin Abdullah and Osman Bakar that directly discuss the integration of knowledge, Islamic epistemology, the relationship between religion and knowledge, and Islamic education. The primary sources include books, scientific articles, and academic works of both figures that are relevant to the research focus. Meanwhile, secondary sources consist of journal articles, books, and previous studies that discuss the thought of the two figures as well as the development of knowledge integration in Islamic higher education in Indonesia and Malaysia. The selection of sources was conducted purposively, based on the direct relevance of the sources to the themes of knowledge integration, epistemology, and education.

Data collection was carried out through several stages. First, the researcher identified the major works of the two figures related to education and epistemology. Second, the researcher conducted an in-depth reading to identify concepts, propositions, key terms, and arguments related to knowledge integration. Third, the relevant data were classified into several analytical themes, namely (1) the sources and nature of knowledge, (2) the relationship between revelation and reason, (3) the relationship between religious sciences and modern sciences, (4) the concept of knowledge integration, (5) the objectives of education, and (6) the epistemological implications for Islamic education. This process enabled the ideas of the two figures to be analyzed based on the same categories before the comparison was conducted.

Data analysis used qualitative content analysis and comparative analysis. The analysis was conducted through three stages. First, data reduction and categorization, namely selecting parts of the works that were directly related to the research focus and grouping them based on the predetermined epistemological themes. Second, interpretation, namely understanding the relationships between concepts within the framework of each figure's thought by considering the context of the arguments developed in their works. Third, comparison, namely bringing together the results of the analysis of the thought of M. Amin Abdullah and Osman Bakar based on the same categories to identify points of similarity, differences, and the distinctive characteristics of each body of thought.

To maintain the accuracy of interpretation, the study distinguishes between ideas explicitly expressed by the two figures and the researcher's interpretation of those ideas. The comparative analysis is directed toward

explaining how M. Amin Abdullah and Osman Bakar construct conceptions of integrative education based on their respective epistemological foundations.

RESULTS AND DISCUSSION

Results

Epistemological Foundations of Integrative Educational Thought

The integrative educational thought of M. Amin Abdullah and Osman Bakar both departs from a critique of the fragmentation of knowledge, but they construct their epistemological foundations through different points of emphasis. In Amin Abdullah's thought, the issue of integration is constructed through a critique of the dichotomy and separation of scholarly disciplines in Islamic higher education. He develops the integration-interconnection paradigm, which places various disciplines in dialogical and complementary relationships. In his thought, religious sciences are not positioned as a separate domain, nor are general sciences viewed as disciplines detached from values and human concerns. This paradigm calls for interconnectedness among Islamic sciences, social sciences and humanities, and natural sciences through academic interactions that allow each discipline to contribute to one another[8].

For Amin Abdullah, integration-interconnection does not mean eliminating the differences in the character of each discipline. On the contrary, these differences are maintained as epistemological richness, but they should not result in scholarly isolation. According to him, various disciplines are considered to have limitations when used individually to understand complex realities. Therefore, dialogue among disciplines becomes an epistemological necessity[9]. This idea was subsequently developed toward multidisciplinary, interdisciplinary, and transdisciplinary approaches, which allow various fields of knowledge to interact in order to understand issues more comprehensively. Amin Abdullah even emphasizes the importance of semipermeable relationships, intersubjective verifiability, and creative imagination in relations among disciplines.

The epistemological foundation of Amin Abdullah is also related to his effort to connect several epistemological traditions in Islamic studies. Within the framework widely associated with his thought, bayani, burhani, and irfani are constructed as approaches that can be interconnected in understanding reality. Bayani gives attention to texts and text-based reasoning, burhani to rational argumentation and proof, while irfani is related to experience and the spiritual dimension. According to him, educational integration takes place at the level of how knowledge is acquired.

Meanwhile, the epistemological foundation of Osman Bakar departs from a more fundamental principle, namely tawhid as the basis of the unity of reality and knowledge. According to him, the problem of the fragmentation of knowledge is a consequence of a worldview in which reality itself is fragmented. The tawhidic epistemology developed by Bakar places the principle of tawhid as the unifying principle of various branches of knowledge. According to him, religious sciences, natural sciences, social sciences, and applied sciences are essentially not situated within completely separate realities because they are all related to one unified reality. This framework is directed toward reconstructing the unity of knowledge within the Islamic intellectual tradition.

In Bakar's construction, the relationship between revelation (*wahy*) and reason (*'aql*) constitutes one of the important foundations of integrative epistemology. Both are instruments that can work harmoniously in understanding reality. The principle of tawhid provides the foundation that enables this relationship to be constructed coherently. Therefore, Bakar extends it as a principle that can guide various branches of knowledge. This perspective also serves as a critique of modern-secular epistemology that separates knowledge from metaphysical frameworks and transcendent values[9].

The fundamental difference between the two thinkers lies in the starting point of their construction of integration. Amin Abdullah begins with the problem of the separation and limitations of scholarly disciplines, and then proposes an integrative-interconnective relationship so that various disciplines can engage in dialogue and complement one another. His emphasis is placed on interrelationships among disciplines, epistemological dialogue, and the interconnectedness of various perspectives in understanding the complexity of reality. Osman Bakar, by contrast, begins with the principle of the unity of reality based on tawhid, and then makes this unity the foundation for the unity of knowledge. Integration in Bakar's thought therefore has a more explicit metaphysical foundation: the unity of knowledge is possible because the reality that constitutes the object of knowledge is essentially a unified whole[10].

Amin Abdullah and Osman Bakar both reject the fragmentation of knowledge that places religious sciences and modern sciences in completely separate epistemological spaces. Both also position the relationship between religion and knowledge not in the form of simple subordination, but rather in the form of

dialogue and interconnectedness. The difference lies in the philosophical basis used to construct this relationship. Amin Abdullah places greater emphasis on the integration-interconnection paradigm and dialogue among disciplines, whereas Osman Bakar provides a more explicit tawhidic foundation through the idea of the unity of reality and the unity of knowledge.

Two Models of Knowledge Integration in the Thought of M. Amin Abdullah and Osman Bakar

Amin Abdullah's model can be understood as relational integration, namely integration that builds productive relationships among academic disciplines. Amin Abdullah's critique is directed at scholarly patterns that operate in isolation, in which religious sciences and modern sciences develop in separate spaces. The integration-interconnection paradigm then offers dialogical relationships among disciplines as an alternative to this dichotomy. A number of studies on his thought indicate that this paradigm was developed to connect Islamic sciences with social sciences, humanities, and natural sciences through multidisciplinary, interdisciplinary, and transdisciplinary approaches[11].

Epistemologically, the strength of this model lies in its rejection of the claim that a single discipline is capable of explaining the entire complexity of reality. Human and social realities, for example, cannot always be understood solely through religious texts, but they are also inadequate if explained only through empirical approaches. Therefore, for Amin Abdullah, integration is an epistemological encounter. Each discipline maintains its character, methods, and areas of competence, but remains open to the contributions of other disciplines.

At the methodological level, the structure of this integration can be seen through the relationship between *bayani*, *burhani*, and *irfani*. Studies of Amin Abdullah's thought indicate that these three forms of reasoning are positioned as modes of reasoning that can be interconnected: *bayani* is related to the authority and interpretation of texts, *burhani* to rationality and the search for objective truth, while *irfani* is related to experience and the spiritual-intuitive dimension [12]. The three should not be read as three independent epistemological boxes. Rather, their integrative value lies in the relationship among these modes of reasoning.

From this perspective, Amin Abdullah's integration is a model of epistemological networking. Texts, reason, empirical experience, and the spiritual dimension are connected to produce a more comprehensive understanding. Consequently, integration must take place at the level of research questions, ways of examining objects, the use of methodologies, and the interpretation of research findings.

However, this model simultaneously reveals its distinctive character: integration begins with the plurality of knowledge and then builds relationships among that plurality. In other words, Amin Abdullah does not eliminate epistemological differences as a prerequisite for integration; rather, these differences become the reason why interdisciplinary dialogue is necessary.

Different from Amin Abdullah, Osman Bakar's model begins with a more fundamental premise: the unity of knowledge must be rooted in the unity of reality. In *Tawhīdic* Epistemology, the principle of *tawhīd* functions as a unifying principle for various branches of knowledge. Bakar explains that this framework departs from a metaphysical principle of the unity of reality and seeks to connect revelation (*wahy*) and reason (*aql*) within an integrated epistemological construction [13].

The theoretical consequence differs considerably from Amin Abdullah's model. If Amin Abdullah begins with the plurality of disciplines that need to be connected, Bakar begins with the unity of reality that should be reflected in the unity of knowledge. Thus, the question of integration for Bakar is not "how can various disciplines engage in dialogue?", but rather a more fundamental question: why should various disciplines be understood as parts of a unity of knowledge? The answer lies in *tawhīd*. Because all reality has an ontological relationship with God as its source, knowledge of various aspects of reality ultimately possesses the same interconnectedness [14].

This conception gives Bakar's model a stronger metaphysical dimension. The integration of knowledge becomes a consequence of the Islamic worldview concerning reality. Within this framework, natural sciences, social sciences, humanities, and religious sciences should not be understood as domains of knowledge that are ontologically separate. Differences in objects and methods remain, but the whole is situated within a single horizon of reality. Bakar also redevelops the classification of knowledge within the Islamic tradition as part of an effort to understand the relationships among these branches of knowledge.

This explains why the relationship between revelation and reason occupies an important position in Bakar's model. Revelation provides a transcendent orientation for knowledge, while reason enables human beings to articulate knowledge about reality. The opposition between revelation and reason does not become the basis of integrative epistemology. Instead, both are placed in a harmonious relationship within the framework of *tawhīd* [15]. This view also contains a critique of modern epistemology that separates

knowledge from metaphysics and values. Within Bakar's framework, knowledge that loses its relationship with its transcendent source potentially loses its orientation regarding the meaning and purpose of knowledge itself.

Bakar's model can be called integration based on the unity of worldview. Integration does not begin with cooperation among disciplines, but with the formation of a way of viewing reality that enables various disciplines to be situated within a single horizon of meaning. Therefore, the educational implications of this model do not only concern curriculum design or interdisciplinary work, but also the formation of students' epistemological worldview [16].

A comparison of the two models shows that the similarity between Amin Abdullah and Osman Bakar lies in their critique of the fragmentation of knowledge, while their main difference lies in the locus of integration [17]. Amin Abdullah places the locus of integration primarily in relationships among disciplines and modes of reasoning; Osman Bakar places it in the unity of reality and the principle of *tawhīd*.

From this comparison, an important conceptual finding can be drawn: the integration of knowledge does not have a single epistemological form. In Amin Abdullah's thought, integration derives its strength from the ability of various disciplines to open themselves to one another and interact without losing their methodological identities. In Osman Bakar's thought, integration derives its legitimacy from the belief that various forms of knowledge ultimately refer to a single reality.

This difference also produces different consequences for education. Amin Abdullah's model is more readily translated into interdisciplinary practices, because its focus lies on relationships among disciplines and methodological openness. Bakar's model, by contrast, demands a more fundamental transformation of the educational worldview, because integration must address assumptions concerning the nature of reality, the sources of knowledge, and the purpose of knowledge.

Educational Implications of Integrative Epistemology in Indonesia and Malaysia

The first implication can be seen in the way the Islamic education curriculum is constructed. In an educational model that is still dichotomous, religious sciences and general sciences tend to be positioned as fields that exist side by side but do not always interact. From Amin Abdullah's perspective, this condition needs to be changed through curriculum designs that enable integration-interconnection among disciplines. Consequently, Islamic education can move from a discipline-based curriculum model toward a more interdisciplinary and problem-oriented approach. Issues such as poverty, climate change, artificial intelligence, health, economics, or social inequality, for example, cannot be sufficiently understood through only one field of knowledge [18]. Within Amin Abdullah's framework, these issues can bring together Islamic perspectives with social sciences, natural sciences, technology, and humanities. Integration thus takes place through the objects and problems of knowledge, rather than merely through the placement of religious courses within general study programs.

For Osman Bakar, the curricular implications operate at a more fundamental level. The curriculum not only needs to bring together various disciplines, but also needs to be constructed based on the unity of worldview. If all reality is understood within the framework of *tawhīd*, then the classification of knowledge should not produce an epistemological separation that severs the relationship between knowledge and the transcendent dimension. Therefore, education must produce learners who are capable of understanding the relationship between knowledge, values, reality, and the purpose of life [19].

The difference between the two can be formulated analytically: Amin Abdullah provides curricular implications at the level of relationships among disciplines, whereas Osman Bakar demands worldview coherence underlying the entire structure of the curriculum [20].

Integrative epistemology also changes the positions of teachers and learners in the learning process. Learning cannot entirely depend on the transmission of knowledge from lecturers to students. Learning needs to provide space for dialogue, interpretation, argumentation, and encounters among various scholarly perspectives.

From Amin Abdullah's perspective, this approach is consistent with the character of integration-interconnection, which demands openness to various perspectives. Students are required to understand how a discipline relates to other disciplines when it is used to examine a particular issue [21]. Therefore, learning can be directed toward cross-disciplinary discussions, team teaching, problem-based learning, collaborative research, and academic assignments that require students to use more than one scholarly perspective.

Meanwhile, Osman Bakar's framework adds a dimension of value orientation and worldview. Learning is directed toward an awareness of the relationship between knowledge and human responsibility. Within a

tawhidic framework, mastery of knowledge is not regarded as the ultimate goal. Knowledge must have an ethical orientation and contribute meaningfully to human life [22].

This difference indicates that integrative pedagogy has two complementary dimensions. Amin Abdullah emphasizes epistemological dialogue, while Osman Bakar emphasizes epistemological-ethical orientation. Dialogue enables learners to understand the complexity of reality; a tawhidic orientation provides a framework of values concerning how such knowledge should be used.

The most significant implication of these two bodies of thought can be found in research practices. Epistemological integration demands a shift from research that operates solely within disciplinary boundaries toward research capable of bridging various scholarly traditions. In the context of Amin Abdullah, this can be realized through multidisciplinary, interdisciplinary, and transdisciplinary approaches. Researchers need to recognize the possibility that a problem may have dimensions that cannot be adequately explained by a single discipline [23].

Thus, integration is not merely the citation of various disciplines in a single article. More substantive integration occurs when concepts, methods, data, and arguments from various disciplines are genuinely used to produce new understandings of the research object [24]. This is important because there is a distinction between multidisciplinary, in which various disciplines work side by side, and interdisciplinary, in which methodological and conceptual interaction occurs among those disciplines.

For Osman Bakar, the development of knowledge has an additional dimension in the effort to restore knowledge to an epistemological and metaphysical unity. Therefore, research needs to question the epistemological assumptions underlying the production of knowledge. In this context, questions concerning objectivity, values, the purpose of knowledge, and the relationship between humans and reality become part of the scholarly project.

From a comparative perspective, it can be argued that Amin Abdullah provides more explicit methodological tools for connecting various disciplines, whereas Osman Bakar provides a more explicit philosophical framework for explaining why such relationships have legitimacy within Islamic epistemology. Both can therefore be positioned as complementary: one explains the mechanism of interconnectedness, while the other provides the worldview foundation for such interconnectedness.

In the Indonesian context, Amin Abdullah's thought has direct relevance to the development of UINs, which institutionally bring together Islamic studies programs with social sciences, humanities, science, and technology. The main challenge of integration is ensuring that institutional proximity produces epistemological interaction. A university may have religious and science faculties within the same organizational structure without actually producing knowledge integration. Therefore, the measure of integration needs to shift from institutional co-existence toward epistemological interaction.

In Malaysia, particularly within the tradition of Islamic higher education that has developed around the ideas of integration and the Islamization of knowledge, Osman Bakar's thought offers a philosophical basis for ensuring that integration is not reduced to the process of inserting Islamic elements into modern disciplines [25]. The more fundamental issue is how these modern disciplines are situated within a worldview that acknowledges the interconnectedness of knowledge, reality, values, and the purpose of life. In this context, integration is a project of worldview formation, not merely a curricular project.

Nevertheless, the comparative findings also show that both approaches face the same challenge: how to translate abstract epistemological ideas into educational practices that can be operationalized. Integration may lose its substance if it is only manifested in the naming of study programs, the combination of courses, or the addition of Qur'anic verses to learning materials without changes in the structure of questions, methodologies, and ways of producing knowledge. Therefore, the success of integrative education should not be measured merely by how many elements of religion and general sciences are present within a single curriculum, but by the extent to which there is a transformation in how knowledge is produced, taught, tested, and used.

Based on the overall analysis, the implications of Amin Abdullah's and Osman Bakar's thought can be placed within a single conceptual spectrum. Amin Abdullah offers integration through connectivity, whereas Osman Bakar offers integration through unity. Connectivity requires openness among disciplines; unity requires a worldview that provides coherence to various disciplines. In education, these two approaches do not necessarily have to be contrasted. Interdisciplinary interconnectedness without a coherent worldview may produce technical integration, while a worldview without mechanisms for interdisciplinary dialogue may remain a philosophical construction that is not implemented.

Therefore, the comparative findings of this study lead to the understanding that integrative education requires two complementary layers. The first layer is horizontal integration, namely the dialogical relationship among disciplines, methods, and perspectives, as strongly emphasized in Amin Abdullah's

thought. The second layer is vertical integration, namely the relationship between knowledge, reality, values, and transcendent purposes, as more explicitly emphasized in Osman Bakar's thought. Substantive integrative education requires both: epistemological interconnectedness as well as worldview coherence.

Thus, the comparative contribution of these two thinkers lies in their ability to demonstrate that the problem of knowledge integration has two distinct but mutually necessary dimensions. In the context of Indonesia and Malaysia, integrative education can be understood as an effort to build productive relationships among disciplines while simultaneously situating all scholarly activities within a coherent framework of meaning and educational purpose. From this perspective, knowledge integration is both an epistemological project and an educational project: it transforms how knowledge is constructed while simultaneously transforming how human beings are educated to give meaning to knowledge.

Discussion

The Integration of Knowledge as a Response to the Fragmentation of Knowledge

The findings regarding Amin Abdullah's thought indicate that the main problem of integration lies in the disconnection of epistemological relationships among these disciplines. Integration-interconnection, therefore, should not be understood as the fusion of religious sciences and general sciences. Rather, the distinctiveness of each discipline is maintained so that interdisciplinary dialogue can take place productively. In this context, integration differs from mere juxtaposition, which places two or more fields of knowledge side by side without producing conceptual relationships between them [26].

This interpretation expands the understanding of the transformation of Islamic higher education in Indonesia. The institutional transformation from IAIN to UIN, for example, structurally enables Islamic sciences, social sciences, humanities, science, and technology to exist within a single institution. However, such institutional coexistence does not in itself produce epistemological integration. The findings of this study indicate that a more substantive measure is whether interaction occurs at the level of research questions, concepts, methods, and knowledge production.

At this point, Osman Bakar's thought provides a different dimension. If Amin Abdullah begins with the problem of disciplinary separation, Bakar places the issue within a more fundamental horizon, namely the unity of reality. The principle of *tawhīd* provides a metaphysical foundation that reality is not essentially fragmented. The fragmentation that appears in the classification of disciplines is the result of the process of specialization in human knowledge. Therefore, the integration of knowledge is a consequence of the view that various forms of knowledge are ultimately related to a single reality.

This difference demonstrates that the two thinkers actually operate at different but interconnected epistemological levels. Amin Abdullah primarily addresses the question of how knowledge systems should interact, whereas Osman Bakar addresses why different knowledge systems can be understood as parts of a unified order of knowledge.

From Curriculum Integration to Epistemological Integration

The research findings also demonstrate that the issue of integration in education cannot be adequately addressed through curriculum changes alone. In educational practice, integration can often be reduced to the addition of Islamic content to general courses or vice versa. Such a model produces an integration that adds new elements without changing the epistemological structure of the existing knowledge.

Amin Abdullah's thought enables a critique of this model because integration-interconnection requires dialogue among perspectives. In the educational context, students need to understand how these fields can be used together to explain a particular issue. For example, an economic issue does not only have a technical-economic dimension, but may also have social, ethical, legal, and religious dimensions. Integration occurs when these various perspectives interact in the process of knowledge production. Meanwhile, Osman Bakar takes the issue to a deeper level. Even if various disciplines have successfully interacted, there remains a question concerning the worldview underlying such interaction. For Bakar, integration is incomplete if knowledge continues to be understood as an activity free from metaphysical and value orientations. Therefore, the integration of knowledge must consider the relationship between knowledge and reality, human beings, values, and the purpose of life.

The two thinkers help distinguish between two forms of integration that are often equated. Structural integration occurs when various disciplines are placed within a single institution or curriculum, whereas epistemological integration occurs when the assumptions, concepts, methods, and purposes of knowledge begin to become interconnected. The findings of this study indicate that the latter form is far more substantive for understanding the idea of integrative education.

The comparison of Amin Abdullah and Osman Bakar also enables this study to develop an analytical categorization in the form of horizontal integration and vertical integration. Horizontal integration refers to relationships among various disciplines, perspectives, and methods. This dimension is strongly evident in Amin Abdullah's integration-interconnection paradigm. Vertical integration refers to the relationship between knowledge and fundamental principles concerning reality, values, and transcendent purposes. This dimension is more explicit in Osman Bakar's tawhidic epistemology.

This categorization is not intended to rigidly separate the two thinkers. On the contrary, both demonstrate that integrative education requires these two dimensions simultaneously. Horizontal integration without a philosophical foundation may produce pragmatic interdisciplinary collaboration but lose its epistemological orientation. Conversely, vertical integration without mechanisms for interdisciplinary dialogue may produce a coherent worldview but lack methodological instruments for engaging with the complexity of modern knowledge.

From this perspective, the thought of Amin Abdullah and Osman Bakar can be positioned in a complementary relationship. Amin Abdullah emphasizes the mechanism of interconnectedness among forms of knowledge, while Osman Bakar emphasizes the foundation of unity that enables such interconnectedness to possess epistemological meaning. Their synthesis allows the concept of integrative education to be understood as a relationship between epistemological connectivity and metaphysical coherence.

The Contexts of Indonesia and Malaysia: Similar Problems, Different Articulations

A comparison of the contexts of Indonesia and Malaysia shows that both countries face a similar problem: how Islamic higher education can respond to the development of modern knowledge without losing its Islamic epistemological foundation. However, the articulation of this issue has developed through different intellectual traditions.

In the Indonesian context, Amin Abdullah's idea of integration-interconnection is highly relevant to the transformation of UINs, which brings Islamic sciences together with various fields of modern knowledge. The main problem is how to establish productive epistemological relationships among these various fields. In the Malaysian context, particularly within the intellectual tradition that has developed around the ideas of the integration and Islamization of knowledge, Osman Bakar's thought emphasizes the importance of an Islamic worldview as the foundation for understanding various forms of knowledge. The issue of integration is more strongly associated with questions concerning the philosophical and metaphysical foundations of knowledge.

This difference demonstrates that the term "integration of knowledge" should not be treated as a completely universal category. The concept always interacts with intellectual traditions, institutional structures, educational histories, and local epistemological problems. Therefore, comparing Indonesia and Malaysia allows us to see how a global problem—the fragmentation of knowledge—is addressed through different intellectual constructions.

CONCLUSION

This study shows that integrative educational thought in Indonesia and Malaysia constitutes an epistemological response to the fragmentation of knowledge in Islamic education. Through a comparison of the thought of M. Amin Abdullah and Osman Bakar, the study finds that both share a concern with the separation between religious sciences and modern sciences, but construct models of integration through different points of emphasis. Amin Abdullah develops the integration-interconnection paradigm, which emphasizes dialogical and productive relationships among disciplines and modes of reasoning. Meanwhile, Osman Bakar develops a tawhidic epistemology that places the unity of reality as the foundation for the unity of knowledge.

This difference demonstrates that the integration of knowledge cannot be reduced to the combination of disciplines or the addition of Islamic elements to modern knowledge. In Amin Abdullah's thought, integration primarily operates through epistemological connectivity, whereas in Osman Bakar's thought it operates through tawhidic coherence. Thus, the integration of knowledge has horizontal and vertical dimensions. The horizontal dimension concerns relationships among disciplines, methods, and perspectives; whereas the vertical dimension concerns the relationship between knowledge, reality, values, and transcendent purposes.

In the contexts of Indonesia and Malaysia, these findings indicate that integrative education needs to move beyond integration at the institutional and curricular levels toward integration at the level of knowledge production and construction. Substantive integrative education demands attention to how knowledge is directed. In this sense, the thought of Amin Abdullah and Osman Bakar provides two different but complementary perspectives for understanding integrative education as an epistemological project.

This study has several limitations. First, the study focuses on two figures, namely M. Amin Abdullah and Osman Bakar. Therefore, the findings cannot yet represent the entire spectrum of integrative educational thought in Indonesia and Malaysia. Second, the study employs a literature-based approach, so the analysis is primarily based on the works and interpretations of the thought of the two figures. This study has not empirically examined the extent to which these epistemological ideas are applied in learning practices, curricula, research, or educational policies at particular institutions. Third, the comparison between the two figures potentially faces the issue of asymmetry in intellectual and institutional contexts. Amin Abdullah's thought developed primarily within the context of the transformation of Indonesian Islamic higher education, whereas Osman Bakar's thought developed within the Malaysian intellectual tradition and the discourse of the Islamization of knowledge, which has its own history. Therefore, the similarities and differences identified need to be understood within their respective historical and intellectual contexts, rather than as two bodies of thought that developed under completely identical conditions.

Future research can develop this study through empirical investigations of Islamic higher education institutions in Indonesia and Malaysia. Research can examine how the principles of integration-interconnection and tawhidic epistemology are translated into curricula, learning designs, faculty research, and students' learning experiences. A comparative case study approach involving particular universities can also be employed to examine the differences between epistemological ideas and institutional implementation.

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