

# IMPLEMENTING AN INTEGRATIVE LEARNING MODEL IN MADRASAH ALIYAH: A CASE STUDY OF DARUL ULUM ISLAMIC BOARDING SCHOOL, WEST KALIMANTAN

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## ABSTRACT

This study aims to analyze the integrative learning model by exploring various methods and strategies applied at the Madrasah Aliyah of Darul Ulum Islamic Boarding School in West Kalimantan. It employs a qualitative descriptive approach, incorporating both phenomenological and psychological perspectives. Data collection methods include observation, interviews, and documentation. The data analysis process consists of three main stages: data reduction, data presentation, and conclusion drawing. The integrative learning model examined in this study seeks to uncover fundamental concepts and principles by connecting knowledge across disciplines. It also aims to identify the unique characteristics of each subject by employing approaches such as project-based learning, problem-based learning, and collaborative learning. The structure of this model highlights the roles of both teachers and students, along with the key elements that shape the learning process. Several learning models are implemented within this integrative framework, including Quantum Teaching (QT), Problem-Based Learning (PBL), Cooperative and Interactive Learning, and Contextual Learning - such as Teaching Contextual Learning (TCL), Discovery/Inquiry Learning, and Base Learning. The design of the integrative learning model begins with an analysis of learners' characteristics. This is followed by the formulation of learning objectives and competencies encompassing cognitive, affective, and psychomotor domains. Various learning methods are then utilized to achieve holistic educational goals by integrating religious, academic, and social sciences, enabling students to develop a comprehensive understanding of life. The model encompasses multiple disciplines, including language, mathematics, and Islamic studies. It also enables students to acquire knowledge and skills in fields such as sociology, economics, geography, history, biology, physics, and chemistry. Moreover, the model encourages learners to apply religious principles in their daily lives, fostering both intellectual growth and spiritual development.

Keywords: Learning model; integrative learning model

### **1. INTRODUCTION**

The National Education System Law (UU Sisdiknas) No. 20 of 2003 establishes the fundamental goal of developing students' potential to become well-rounded individuals who are not only faithful and devoted to God Almighty but also possess noble character, good health, substantial knowledge, and various competencies. The law emphasizes the formation of citizens who are creative, independent, democratic, and socially responsible, reflecting a comprehensive vision that integrates spiritual, intellectual, and civic development. This educational philosophy is further elaborated in the 2004 curriculum for Madrasah Aliyah and MTs, which specifically requires graduates to demonstrate daily behaviors aligned with Islamic teachings while fulfilling their social rights and obligations. The curriculum cultivates critical and logical thinking skills particularly for problem-solving situations, alongside fostering creativity, productive work habits, competitive and cooperative attitudes, as well as environmental responsibility. Improving education guality fundamentally depends on enhancing the teaching and learning process, which represents a dynamic interaction between teachers and students within educational settings. Teachers serve as crucial facilitators of learning and drivers of educational progress, requiring key professional qualities including patience, resilience, adaptability, and openness to create effective learning environments. The selection of appropriate teaching models becomes particularly important as these serve as essential tools for achieving learning objectives and organizing subject matter within the curriculum framework. Teachers must develop specialized skills to evaluate and implement various instructional approaches that best address their students' diverse needs and learning goals, as this professional competence directly impacts the quality of education delivery and student outcomes.

The advent of Industry 5.0 has brought significant transformations to Indonesia's educational landscape through technological advancements that offer new possibilities for teaching and learning methodologies. Legal frameworks such as Law No. 18 of 2019 establish a dual curriculum system combining pesantren (Islamic boarding school) education with general education components, creating an integrated approach that harmonizes religious and secular knowledge. This educational model, rooted in constitutional mandates including Articles 28 and 31 of the 1945 Constitution along with Article 3 of the National Education System Law, reflects Indonesia's commitment to developing complete citizens who balance spiritual devotion with intellectual capability and social responsibility. Curriculum development plays a pivotal role in realizing these educational aspirations by integrating both kauniyah values, which emphasize observing natural phenomena as manifestations of divine greatness, and gauliyah values derived from scriptural teachings. An effective Islamic education curriculum must transcend mere transmission of sharia sciences to foster deep conceptual understanding, broad intellectual perspectives, and practical guidance for contemporary challenges. Modern educational philosophy advocates moving beyond rigid distinctions between "general" and "religious" knowledge, recognizing instead how different academic disciplines can mutually enrich one another when properly integrated. This holistic approach aligns with Indonesia's vision of education that develops complete human beings capable of navigating modern complexities while maintaining strong ethical foundations, ultimately producing graduates who contribute meaningfully to both national development and global civilization.

Integrative learning represents a comprehensive educational approach that enhances student learning outcomes through the systematic integration of various instructional models, media, methods, and strategies. This pedagogical framework provides teachers with a versatile toolkit to achieve learning objectives while addressing diverse student needs. The conceptual foundation of integrative learning models lies in their ability to systematically organize the teaching-learning process, ensuring the effective attainment of educational goals. Indonesia's legal framework, particularly Article 28 Paragraph 1 and Article 31 of the 1945 Constitution, along with Article 3 of the National Education System Law No. 20/2003, explicitly mandates education to develop complete Indonesian citizens who embody spiritual devotion (faith in God Almighty), moral excellence, physical health, intellectual capability, creativity, independence, and democratic values. To operationalize these ambitious goals, curriculum design must transcend conventional approaches by meaningfully incorporating both kauniyah (observational/natural sciences) and qauliyah (revealed/scriptural) values, creating an educational experience that extends beyond mere content delivery to holistic formation.

The integrative learning approach, as conceptualized by Fogarty (1991), represents a deliberate pedagogical strategy that establishes meaningful connections across various subject matter components. This methodology fundamentally transforms learning into a holistic process where students develop not only discrete knowledge components but also profound understanding of the interrelationships between concepts. Compared to traditional monolithic approaches, contemporary integrative models demonstrate superior effectiveness by actively engaging learners in constructing knowledge through authentic, contextualized experiences. The approach's strength lies in its capacity to foster critical thinking, analytical reasoning, and reflective practice, equipping students with skills to apply theoretical knowledge to real-world situations. This pedagogical orientation aligns seamlessly with constructivist learning theories, which posit knowledge construction as an individualized process emerging from learners' interactions with their environment. Within this paradigm, teachers assume the role of expert facilitators who design learning environments conducive to exploration, collaboration, and problem-solving, rather than serving as mere transmitters of information. The constructivist approach redefines learning as an active, experiential process where students construct understanding through continuous reflection on authentic challenges, thereby achieving deeper comprehension and practical competence.

The implementation of integrative learning necessitates careful curriculum design that bridges disciplinary boundaries while maintaining academic rigor. By synthesizing kauniyah and qauliyah perspectives across subject areas, educators create learning experiences that simultaneously develop cognitive skills and value systems. This dual-focused approach enables students to perceive connections between scientific inquiry and spiritual understanding, between empirical observation and ethical consideration. The integrative model proves particularly effective in cultivating higher-order thinking skills as it requires students to constantly analyze, evaluate, and synthesize information from multiple perspectives. Furthermore, this approach naturally lends itself to project-based and problem-based learning methodologies, where students tackle complex, real-world challenges that demand interdisciplinary solutions. The teacher's role evolves into that of a learning architect who designs multifaceted educational experiences, selects appropriate instructional strategies, and provides scaffolding to support student growth. Assessment within this framework similarly becomes more comprehensive, evaluating not only content mastery but also students' ability to make cross-disciplinary connections, apply knowledge in novel situations, and articulate the value implications of their learning. Ultimately, integrative learning prepares students for the complexities of modern life by developing both the intellectual toolkit and moral compass needed to navigate an increasingly interconnected world.

An effective integrative learning model creates a dynamic and engaging educational environment, revitalizing the learning process by making it more interactive, meaningful, and relevant to students. When implemented thoughtfully, such models foster intellectual stimulation while maintaining an enjoyable atmosphere, ensuring that learners remain motivated and actively engaged. The key to success lies in the teacher's ability to select and adapt learning models that align with both the cognitive and emotional needs of students, as well as the nature of the subject matter being taught. A well-matched learning approach not only enhances comprehension but also cultivates a sense of enjoyment in learning, which in turn facilitates deeper understanding and retention of knowledge. This principle holds particular significance in Islamic educational institutions, such as Madrasah Aliyah within Islamic boarding schools (pesantren), where the integration of religious and general knowledge is essential for holistic student development. For instance, at Darul Ulum Kubu Raya, the adoption of integrative learning methods ensures that students do not merely memorize religious and scientific concepts but also internalize their interconnectedness, applying them in both academic and real-life contexts. By employing models that resonate with students' learning tendencies - such as project-based learning, inquiry-based approaches, or collaborative discussions - teachers can create a classroom environment where Islamic teachings and modern knowledge reinforce one another. Moreover, in such settings, integrative learning goes beyond cognitive development; it nurtures spiritual and ethical growth by embedding Islamic values into every aspect of education. Students learn to see the harmony between faith and reason, between scriptural teachings (qauliyah) and the observable world (kauniyah). This balanced approach not only strengthens their academic foundation but also prepares them to navigate contemporary challenges with wisdom, adaptability, and a strong moral compass. Thus, the thoughtful application of integrative learning models in Islamic education not only enhances academic achievement but also shapes well-rounded individuals who are intellectually capable, spiritually grounded, and socially responsible.

## 2. METHODS

This study is categorized as descriptive qualitative research, as it aims to provide a detailed and in-depth portrayal of the research findings by describing the actual data collected directly from the field. Rather than relying on statistical generalizations, this approach emphasizes the richness and contextual depth of the data. The study seeks to naturally represent the research object, which in this case is the implementation of the integrative learning model at Madrasah Aliyah of Darul Ulum Islamic Boarding School, located in West Kalimantan. This integrative model blends religious and general education within a pesantrenbased learning environment, reflecting both cognitive and character-building aspects of Islamic

education. The research adopts a multi-dimensional approach, integrating phenomenological, sociological, and psychological perspectives. The phenomenological aspect is used to explore participants' lived experiences and perceptions of the learning model, the sociological approach examines the interaction between educational practices and the pesantren's social structure, and the psychological dimension investigates the learners' individual responses, motivations, and developmental aspects related to the integrative learning process.

To gather comprehensive and reliable data, the study utilized a combination of qualitative data collection methods, including direct observation, in-depth interviews, and documentation review. Observation was conducted systematically to capture real-time teaching-learning activities, while interviews were held with key stakeholders such as teachers, students, and school administrators to understand their insights and experiences. Documentation, including lesson plans, school policies, and student work, was analyzed to support and triangulate findings from other sources. The instruments used in this research included structured observation guides, semi-structured interview protocols, and documentation checklists. These tools were designed to ensure consistency and depth in data collection across different contexts and participants. The data analysis followed a qualitative framework consisting of three interconnected stages: data reduction (simplifying and organizing the raw data), data display (presenting the data in visual or narrative formats to identify patterns and themes), and conclusion drawing and verification (interpreting the data to draw meaningful and valid conclusions based on evidence). This systematic process ensured the credibility, reliability, and interpretive rigor of the research findings.

### **3. RESULTS AND DISCUSSION**

Learning is fundamentally a process of interaction involving learners, teachers, and various learning resources within a structured learning environment. According to the Kamus Besar Bahasa Indonesia (Big Indonesian Dictionary), "belajar" (to learn) is defined as a noun referring to the process, method, or act of enabling someone or a living being to acquire knowledge or skills. In the context of formal education, learning is understood as an interactive process not only between teachers and students, but also among students themselves, fostering both individual and collaborative engagement. The ultimate goal of learning is to strengthen and deepen students' knowledge, attitudes, and skills through purposeful educational experiences.<sup>1</sup>

Learning is essentially an effort to facilitate students in acquiring meaningful knowledge and competencies. It can be conceptualized as a dynamic process that encompasses memory, cognition, and metacognition – each playing a crucial role in shaping understanding. This dynamic nature of learning often mirrors real-life experiences, making it a natural and continuous process for all individuals. In practical terms, learning represents the process of acquiring new information and developing new skills. When educators contemplate what learners should know and be able to do, they must simultaneously consider the most effective

<sup>&</sup>lt;sup>13</sup>M. Sobry Sutikno, 'Learning Methods & Models "Making the Learning Process More Variative, Active, Innovative, Effective and Fun"', 2019.

strategies to deliver that knowledge in a meaningful and efficient way. Therefore, clearly defining learning outcomes becomes essential in determining the methods and approaches necessary to achieve them. Integrative learning is an approach that brings together multiple components – be they disciplines, competencies, or experiences – into a cohesive learning process. Rather than treating subjects as isolated units, integrative learning encourages interconnectedness, helping students to see relationships across different domains of knowledge. Learning within this model can be categorized into two major forms: intermedia learning and inter-subject learning. Intermedia learning refers to the integration of various aspects within a single subject, such as combining reading, writing, and critical thinking in a language course. On the other hand, inter-subject learning involves the integration of content from different subjects into a unified learning experience, such as combining science, mathematics, and social studies to solve real-world problems.<sup>2</sup>

As Rahmad (2019) explains, integrative learning is essentially the process of combining different disciplines to create a more holistic educational experience. This integration is not limited to subject matter or content competencies, but extends to the outcomes, learning processes, and the context in which learning occurs. In integrative learning, cognitive (knowledge), affective (attitudes), and psychomotor (skills) domains are addressed simultaneously, allowing students to acquire competencies in an integrated and contextualized manner. The context of learning is also broadened to include real-life situations, making learning more relevant and applicable. In such models, a single real-world context can serve as the basis for developing competencies from various educational components, making learning not only more meaningful but also more sustainable.<sup>3</sup>

The term learning model, as introduced by Joyce and Weil,<sup>4</sup> refers to a comprehensive conceptual framework of teaching and learning activities that are both operationally applicable and scientifically grounded. The word model is specifically used to denote a structured and systematic guide for carrying out instructional tasks.<sup>5</sup> It represents not only the theoretical underpinnings of an instructional strategy but also a blueprint that informs and directs pedagogical practices. According to Joyce and Weil, a learning model serves as a conceptual schema that guides educators in selecting and organizing content, managing classroom interactions, and achieving clearly defined educational goals. In a similar vein, Dahlan<sup>6</sup> defines a learning model as a plan or pattern utilized in curriculum development, the structuring of subject matter, and instructional planning—both in formal classroom contexts and in other educational settings. Meanwhile, Toeti Soekamto and Udin Saripudin Winataputra<sup>7</sup> emphasize that a learning model outlines a series of systematic procedures designed to organize learning experiences in a way that enables learners to attain predetermined objectives. These conceptual

<sup>&</sup>lt;sup>2</sup> Miftahul Huda. Models of Teaching and Learning, Methodical Issues and Pradigms. Yogyakarta;Learning Library; 2017 page 2

<sup>&</sup>lt;sup>3</sup> Bitari Widia Sari and Dedih Surana, 'An Integrative Learning Model for Islamic Education Subjects during the Covid-19 Pandemic', 2022, pp. 65-72.

<sup>&</sup>lt;sup>4</sup> Sobry Sutikno, Learning Methods and Models Making the Learning Process More Variative, Active, Innovative, Effective and Fun. Mataram: Lombok, 2019 Page

<sup>&</sup>lt;sup>5</sup> Sobry Sutikno, Learning Methods and Models Making the Learning Process More Variative, Active, Innovative, Effective and Fun. Mataram: Lombok, 2019 Page 52

<sup>&</sup>lt;sup>6</sup> (Sobry Sutikno, 2019

<sup>&</sup>lt;sup>7</sup> 8 (Sobry Sutikno, 2019)

frameworks serve as critical tools for educators and instructional designers, helping to ensure that teaching and learning processes are purposeful, well-structured, and goal-oriented. One such model is the integrative learning model, which seeks to harmonize religious and general knowledge within a unified pedagogical approach. This model is particularly relevant in Islamic education settings where there is a need to balance cognitive development with moral and spiritual values. Integrative learning emphasizes the interconnectedness of knowledge domains and aims to foster holistic student development. Empirical studies have demonstrated that the integration of religious and secular education contributes to the formation of well-rounded individuals - morally grounded, intellectually capable, and socially responsible.<sup>8</sup> At the level of Madrasah Aliyah, this model is implemented through the integration of the pesantren and madrasah curricula. The approach involves embedding religious teachings traditionally taught in Islamic boarding schools (pesantren) with the national educational content offered in madrasah institutions. This synergy allows students to acquire a dual competence: mastery of religious sciences and proficiency in general academic disciplines. As a result, students are prepared not only to navigate modern academic and professional environments but also to uphold moral values rooted in Islamic teachings. This integrated model reinforces the mission of Islamic education to produce a generation that is both intellectually skilled and ethically grounded.<sup>9</sup>

Based on the definitions above, a learning model can be defined as a conceptual framework that outlines systematic procedures for organizing students' learning experiences in order to achieve specific instructional objectives. Learning models function as essential guidelines for instructional designers and educators in planning and implementing effective teaching and learning activities.<sup>10</sup> The learning model can be interpreted as a structured plan or pattern that serves as a guiding framework for designing various learning resources and instructional media to be utilized in the teaching and learning process.<sup>11</sup> The learning model is oriented toward the design of instructional systems with the teacher as the primary target. This is because teachers act as both designers of instructional activities and members of instructional development teams. Learning, in essence, is a process of interaction between teachers and students, which can occur either directly – such as in face-to-face classroom settings – or indirectly through the use of various media. A learning model functions as a comprehensive plan or pattern that can be employed to develop curricula (as long-term instructional plans), design learning materials, and guide instructional processes both in the classroom and in other educational contexts.<sup>12</sup>

The implementation of the integrative learning model at Madrasah Aliyah of Pondok Pesantren Darul Ulum incorporates several key elements within its curriculum structure, aiming to harmonize religious and general education to foster both the character development and academic competence of students. Research conducted in various Islamic boarding schools

<sup>&</sup>lt;sup>8</sup> Sari, B., & *Surana*, D. (2022). Integrative Learning Model for Islamic Education Subjects during the Covid-19 Pandemic. Journal of Islamic Education Research. https://doi.org/10.29313/jrpai.v2i1.988.

<sup>&</sup>lt;sup>9</sup>Agus Suprijono, Cooperative Learning Theory and Paikem Application; Yogyakarta. Student Library. 2017 p 64

<sup>&</sup>lt;sup>10</sup>Rusman. Learning Models to Develop Teacher Professionalism. Bandung; PT. RajagrafindoPersada, 2014 p132

<sup>&</sup>lt;sup>11</sup>Mawardi. Implementation of Cooperative Learning Model through Moaral Dilemma Discussion in Developing Empathy and Care (Experimental Study on Citizenship Education at Muhammadiyah 2 Pontianak Senior High School (Dissertation). 2013

<sup>&</sup>lt;sup>12</sup> Ali Mudhofir and Eva Fatimatur Rusydiyah, Innovative Learning Design from Theory to Practice, Jakarta; PT Rajagrafindo Persada. 2016 p 36

across Indonesia, including at Darul Ulum, reveals distinctive features in curriculum design. Specifically, the curriculum of the Madrasah Diniyah at Pondok Pesantren Darul Ulum emphasizes the development of learners who embody strong Islamic values, possess the ability to tafaqquh fi al-din (deep understanding of religious knowledge), and uphold noble moral character (akhlaq al-karimah). Traditional Islamic learning methods such as sorogan (individualized reading with teachers) and bandongan (group listening to teacher explanations of classical texts) remain central in the delivery of kitab kuning-based instruction. These time-honored pedagogical approaches are integrated with modern educational tools such as laptops and projectors, enhancing the learning experience without compromising the pesantren's traditional values.<sup>13</sup>

The effort to dissolve the dichotomy between religion and science – often rooted in the assumption that religion and science are independent and separate sources of truth – constitutes the core foundation of the integrative learning system, also referred to as the general topic learning model. This model seeks to foster a holistic understanding in learners, enabling them to engage with both religious and scientific knowledge in a complementary and interconnected manner. Through this approach, students are not only encouraged to comprehend religious teachings but are also guided to appreciate and critically engage with scientific disciplines. Given the central role of religion in human life, it is imperative that religious values serve as the ethical and philosophical foundation for the development of science. This philosophical stance is one of the key responsibilities entrusted to Islamic boarding schools (pesantren) in shaping a learning system that aligns with their educational mission and vision.

At Madrasah Aliyah within Pondok Pesantren Darul Ulum, Kubu Raya, this vision is operationalized through the implementation of an integrative curriculum that merges religious and general education in a balanced and purposeful manner. The educational practices adopted aim to produce learners who are not only academically competent but also morally grounded. Integrative learning models - particularly in the domains of science and religion - serve as effective tools in helping students recognize the interrelationship between empirical knowledge and spiritual values. This is achieved through methods such as dialogical learning and valuebased integration, which encourage critical thinking, reflection, and the synthesis of multiple perspectives. Field observations at Madrasah Aliyah of Pondok Pesantren Darul Ulum indicate that the application of the integrative learning model yields positive outcomes, including increased learner engagement, improved participation, and a deeper appreciation for both scientific and religious knowledge. These findings suggest that the integration of religious values and scientific inquiry not only enriches the learning experience but also aligns with the broader goals of Islamic education in nurturing holistic human development.<sup>14</sup> An integrative approach is an educational method that combines Islamic values with general academic subjects such as science, language, and mathematics. For instance, scientific concepts taught in science lessons can be contextualized by linking them to verses from the Qur'an or relevant Hadith, enabling students to not only grasp scientific knowledge on an academic level but also to relate

<sup>&</sup>lt;sup>13</sup> Susanti, O., Septiani, I., & Purbiyanti, E. (2021). Implementation of Course Review Horay Model in Integrative Thematic Learning on Learning Motivation of *Grade* V Students. Js (School Journal). https://doi.org/10.24114/JS.V5I3.26397.

<sup>&</sup>lt;sup>14</sup> A. Zuhaida, et al (2018). *Madrasah Model of Integrative Science: Measuring Concepts and Learning Strategies Based on the Relationship between Science and Religion*. INFERENCE: Journal of Social and Religious Research. https://doi.org/10.18326/infsl3.v12i2.435-456.

it to Islamic perspectives. This approach seeks to foster harmony between scientific understanding and religious values, offering students a holistic framework through which they can appreciate the interconnectedness of divine revelation and natural phenomena. Ultimately, the integrative approach aims to cultivate individuals who are both intellectually capable and spiritually grounded, contributing to the formation of well-rounded and morally conscious learners.<sup>15</sup>

The integrative learning model approach combines various learning elements or subject areas to provide students with a deeper, more meaningful learning experience. By connecting or merging two or more disciplines, this model promotes interdisciplinary learning and allows for the development of broader competencies. One of the key advantages of the integrative model is that it does not overburden students psychologically, as it avoids fragmenting content into isolated subjects and excessive task assignments. Instead, learning becomes more coherent and interconnected, which helps reduce cognitive overload while enhancing engagement. In addition to generating practical educational outcomes, this study also aims to contribute to the body of knowledge by serving as a reference for future research on integrative learning in Islamic education. In the context of modern pedagogy, the integrative learning model presents an effective strategy for combining different disciplines and instructional approaches. It has been shown to improve academic achievement, foster creativity, and enhance learners' problemsolving and critical thinking skills. The integrative learning model, by design, blend's themes, subject areas, or pedagogical methods to create a comprehensive and enriched educational experience. Its central goal is to help learners see the connections between various concepts, making learning more meaningful, contextualized, and relevant to real-life situations. This relevance to everyday life is a crucial factor in motivating students and deepening their understanding.

The implementation of the integrative learning model at Madrasah Aliyah within the Darul Ulum Islamic Boarding School in West Kalimantan has had a positive impact on the overall quality of education and the holistic development of learners. The curriculum design, which integrates religious and general education, supports the development of both intellectual and moral competencies. One of the most notable outcomes is the enhanced student understanding of the interrelationship between religious values and scientific knowledge. Through the integration of religious texts – such as verses from the Qur'an and Hadith – into science lessons, students are encouraged to interpret natural phenomena within a religious framework. This approach not only enriches their cognitive understanding but also strengthens their spiritual awareness. At Madrasah Aliyah Darul Ulum, the integrative model has been especially effective in the Science Department. Religious insights are systematically woven into scientific content to demonstrate that faith and reason can coexist and complement each other. The result is a learning environment where learners are equipped to navigate both religious and scientific discourses, contributing to the formation of individuals who are intellectually competent, morally upright, and socially responsible.

<sup>&</sup>lt;sup>15</sup> R. Adawiyah, et al. (2021). Development of Science Encyclopedia Based on Islam-Science Integration-Interconnection as an Independent Learning Resource for Madrasah Tsanawiyah Students. Edusains. https://doi.org/10.15408/ES.V13I1.12970.

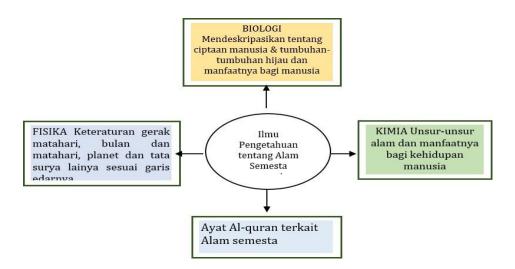


Figure 1. Chart of Integrative Learning Model for Science Major in Grade XI

The Integrative Learning Model at Madrasah Aliyah Darul Ulum for the Science Department applies an integrative approach by combining various disciplines such as physics, chemistry, biology, and mathematics, all of which are based on the Qur'an. This approach emphasizes the relationship between subjects and the relevance of scientific concepts to everyday life. The integrative learning model at Madrasah Aliyah Darul Ulum for science majors aims to foster a deeper understanding of scientific concepts and their real-life applications. Through this approach, learners are expected to develop critical thinking, collaboration, and communication skills. When the subjects are linked with the Qur'an and Hadith, the model presents a framework that connects science subjects (physics, chemistry, and biology) with Islamic teachings, emphasizing the understanding of scientific values within the context of Islam and how both domains support and reinforce each other.

Learners work in groups to carry out projects that integrate themes from science with the teachings of the Qur'an and Hadith, such as Biodiversity and Human Responsibility from an Islamic Perspective. They also conduct experiments that not only focus on scientific outcomes but also explore scientific ethics and responsibilities based on the teachings of the Qur'an. This allows scientific principles to be understood within the context of Islamic teachings, such as the creation and preservation of the environment, natural phenomena, and relevant real-life activities, which are then connected to Islamic values. The integrative learning model at Madrasah Aliyah Darul Ulum for science majors is combined with Qur'an and Hadith subjects, aiming to help students understand the relationship between science and Islamic values. Through this Qur'anic approach, students are expected to develop critical thinking skills and a strong sense of scientific ethics grounded in Islamic teachings.



Figure 2. Chart of Integrative Learning Model for Social Studies Major in Grade XI

The Integrative Learning Model at Madrasah Aliyah Darul Ulum for the Social Studies Department applies an integrative approach by combining various disciplines such as sociology, economics, geography, and history. This model emphasizes the interrelationships between subjects and their applications in social, cultural, and environmental contexts by analyzing reallife situations involving social, economic, and cultural issues. For example, learners may examine changes in government policies and their impacts on society, using actual and relevant issues to encourage critical thinking and the application of theory to practice. Assessment is conducted through various methods, including examinations, presentations, and project reports, in order to thoroughly evaluate students' understanding. The integrative learning model for social studies majors is specifically designed to help learners grasp the connections between multiple disciplines within a social framework. Through this approach, students are expected to develop essential skills such as critical thinking, collaboration, and communication – skills necessary to address real-world societal challenges. Moreover, this model links social studies subjects (sociology, economics, geography, and history) with the study of the Qur'an and Hadith, emphasizing the relevance of Islamic values in social, economic, and cultural contexts. This integration fosters a deeper understanding of how Islamic teachings can guide and inform responses to contemporary social issues.

Analyzing real-life cases that connect Islamic principles with social or economic issues – such as the impact of Islamic business ethics on society in relation to contemporary challenges – encourages learners to relate the teachings of the Qur'an and Hadith to current social realities. The integrative learning model at Madrasah Aliyah Darul Ulum for the Social Studies and Qur'an-Hadith Departments is designed to help students understand the interrelationship between social sciences and Islamic values. Through this approach, learners are expected to develop critical thinking skills and a strong ethical foundation rooted in Islamic teachings and applicable to modern societal contexts. By adopting an integrative learning model design, the integration of science and religion can be effectively applied in madrasah education. Research

findings show that this model can strengthen the relationship between scientific concepts and religious values, leading to more coherent and meaningful learning experiences.<sup>16</sup>

This model encourages project-based learning, where students engage in curriculumrelevant projects that mirror real-life situations. They work collaboratively in teams, which helps develop both problem-solving and interpersonal skills. The problem-based approach is also central to this model, involving learners in addressing authentic challenges that require analysis, solution development, and independent research. These approaches are supported by technology-enhanced learning strategies that utilize digital tools such as computers, internet resources, and mobile applications to enrich content delivery and increase student engagement. Experiential learning plays a crucial role by providing learners with direct experiences through field observations, simulations, or educational visits. Such activities foster deep understanding through firsthand involvement and reflective analysis. In addition, a values-based approach is integrated across all subjects to ensure that Islamic religious values and local cultural wisdom are embedded within the educational experience. This encourages learners to connect ethical and moral considerations with academic knowledge in their daily lives.

The model also incorporates the theory of multiple intelligences, recognizing and accommodating students' diverse cognitive strengths—such as linguistic, logical-mathematical, visual-spatial, bodily-kinesthetic, musical, interpersonal, and intrapersonal intelligences. Various learning activities are designed to allow learners to explore and grow according to their individual potentials. Moreover, the collaborative and discussion-based approach promotes active engagement, where learners participate in group discussions and teamwork-based tasks. These discussions foster critical inquiry and deepen understanding of complex topics through peer exchange. Overall, this integrative learning model creates a diverse, dynamic, and contextually relevant learning environment for students at Madrasah Aliyah Darul Ulum. It supports the holistic development of learners by connecting various disciplines such as religion, social science, natural science, and language. Through this interconnected approach, students are able to see the relationships between different concepts and apply them meaningfully in broader real-world contexts. Paying close attention to learners' individual needs and progress further enhances the effectiveness of this educational model.

## 4. CONCLUSION

The integrative learning approach offers a comprehensive educational strategy that focuses not only on academic achievement but also on the holistic development of learners. It is designed to enhance both learning effectiveness and skill development by encouraging students to actively engage with content in meaningful and relevant ways. Through this approach, learners acquire not only theoretical knowledge but also practical skills that are applicable to real-life situations. These include skills in problem-solving, communication, collaboration, creativity, and decision-making – competencies that are essential for success in both academic

<sup>&</sup>lt;sup>16</sup> Damayanti, C., Rusilowati, A., & Linuwih, S. (2017). Development of Ethnoscience Integrated Science Learning Model to Improve Learning Outcomes and Creative Thinking Ability. Journal of Innovative Science Education, 6, 116-128. https://doi. Org/10. 15294/jise. v6i1.17071.

and societal contexts. Furthermore, integrative learning promotes cultural and religious enrichment, character development, and ethical awareness by embedding Islamic values into the learning process. It emphasizes the importance of nurturing learners' spiritual, intellectual, emotional, and social dimensions, which is especially relevant in the context of madrasah education that seeks to produce well-rounded individuals grounded in both religious and worldly knowledge.

In addition to its developmental outcomes, the integrative learning model is underpinned by essential concepts and principles related to its practical implementation. Effective use of this model requires a solid understanding of the core characteristics of the subject being taught and the unique profiles of learners. Educators must be able to identify the nature and scope of the content, assess the learning needs of students, and then select or adapt appropriate instructional models. A variety of pedagogical frameworks are utilized to implement integrative learning in madrasah settings, including Quantum Teaching (QT), Problem-Based Learning (PBL), Cooperative and Interactive Learning, Contextual Teaching and Learning (CTL), and Discovery/Inquiry Learning. Each of these models supports the core aim of integrative learning – to connect knowledge across disciplines and relate it to students' lived experiences. For instance, Problem-Based Learning promotes inquiry and solution-oriented thinking, while Quantum Teaching creates dynamic learning environments that motivate learners by connecting learning to life.

The design of an integrative learning model also requires careful and systematic planning. This process begins with the analysis of learner demographics, including age, background, prior knowledge, and learning styles. Following this, educators establish specific competencies or learning objectives that encompass the cognitive, affective, and psychomotor domains. These objectives are formulated to guide instructional planning and to ensure that learning outcomes reflect a balance of knowledge acquisition, emotional engagement, and practical skill development. Moreover, the learning design involves selecting and combining a variety of instructional strategies, activities, and media to support different learning styles and to foster active learner participation. Importantly, the model integrates religious, academic, and social dimensions in the curriculum, allowing students to connect classroom learning with real-life situations and moral responsibilities.

At Madrasah Aliyah Darul Ulum, for example, the integrative learning model is applied across various subjects – including religion, social science, mathematics, and language – so that students can develop a comprehensive understanding of the world through both scientific reasoning and religious reflection. By linking scientific concepts with verses from the Qur'an or relevant Hadith, students are encouraged to see knowledge as interconnected rather than compartmentalized. This synthesis helps them appreciate the relevance of Islamic teachings in addressing contemporary issues such as environmental sustainability, social justice, and economic ethics. It also enables them to view their education not merely as a pursuit of academic success, but as a means of becoming ethical contributors to their communities. Ultimately, the integrative learning model aims to prepare learners to face the complexities of modern life with a strong moral compass, critical thinking skills, and the ability to apply interdisciplinary knowledge in real-world contexts. The success of this approach relies on the teacher's ability to design meaningful learning experiences that promote deep understanding, ethical reasoning, and spiritual awareness. In this way, integrative learning goes beyond the transmission of content; it becomes a transformative process that equips learners with the values and competencies needed for lifelong learning and responsible citizenship in accordance with Islamic principles.

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