

## **A MODEL FOR INTEGRATING FORMAL AND NON-FORMAL EDUCATION IN INDONESIA: A CASE STUDY OF CROSS-SECTOR AND THIRD-PARTY SUPPLY CHAIN MANAGEMENT**

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### **Abstract:**

This research expands upon existing theories proposed by Zaniyati and Fathurrohman concerning educational policy integration models, examining the challenge of educational institutional dualism arising from the enactment of Law Number 20 of 2003 in Indonesia. Despite this challenge, the emergence of regional regulations aimed at integrating Islamic non-formal educational institutions (diniyah takmiliah) with formal educational institutions presents a unique opportunity for study. This research investigates and refines the integration model between diniyah takmiliah and formal education, specifically within the East Java Province regions of Sumenep and Pasuruan. Then, utilizing a case study methodology embedded within a political research framework, this research draws upon institutional and actor-based approaches to analyze data collected through document analysis and in-depth interviews. Data analysis adheres to the rigorous methods proposed by Miles et al., encompassing data condensation, data display, and conclusion drawing stages. Findings reveal that the integration model between diniyah takmiliah and formal educational institutions manifests as a synergistic single/cross-sector and third-party supply management model. This research contributes to the scholarly discourse by proposing the investigation of the effectiveness and a factorial analysis of these two integration models for future research endeavors.

### **Abstrak:**

Penelitian ini mendalami dan mengembangkan dua teori yang dikemukakan oleh Zaniyati dan Fathurrohman mengenai model integrasi kebijakan pendidikan. Landasan penelitian ini adalah tantangan dualisme kelembagaan pendidikan yang muncul sebagai dampak dari diberlakukannya Undang-Undang Nomor 20 Tahun 2003. Meskipun demikian, tantangan dualisme ini mendorong lahirnya beberapa peraturan daerah yang berupaya mengintegrasikan lembaga pendidikan diniyah takmiliah (pendidikan keislaman non-formal) dengan lembaga pendidikan umum (formal). Penelitian ini bertujuan untuk mengeksplorasi dan memperluas model integrasi antara pendidikan diniyah takmiliah dengan pendidikan formal di Indonesia, dengan fokus pada dua wilayah di Provinsi Jawa Timur, yaitu Sumenep dan Pasuruan. Penelitian ini menggunakan pendekatan studi kasus dengan kerangka penelitian politik yang mengacu pada pendekatan kelembagaan dan aktor. Pengumpulan data dilakukan melalui telaah dokumen dan wawancara mendalam. Analisis data mengacu pada metode yang diusulkan oleh Miles dkk., meliputi tahapan kondensasi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa model integrasi antara lembaga pendidikan diniyah takmiliah dengan lembaga pendidikan formal mengadopsi bentuk model integrasi sinergi

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single/cross-sector dan third-party supply management. Penelitian ini juga merekomendasikan pengujian efektivitas dan analisis faktorial terhadap kedua model integrasi tersebut untuk penelitian lebih lanjut.

**Keywords:**

The Integration Model, Formal Education, Non-Formal Education, Islamic Education, Diniyah Takmiliyah

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## INTRODUCTION

The ramifications of Indonesian Law Number 20 of 2003 on the national education system are complex and far-reaching. The legislation has engendered considerable debate concerning the extent to which the government, as the national education authority, should be involved in the provision of religious instruction within schools. Furthermore, concerns have been raised regarding the perceived encroachment of government intervention into the autonomy of private educational institutions (Zuhdi, 2006). Consequently, this law necessitates the simultaneous navigation of two fundamental dualisms: the demarcation between general and religious education, and the delineation of responsibilities between public and private educational entities.

The primary focus of this study is the challenge of the first dualism, namely the dichotomy between general and religious instruction, as exemplified by the mandatory diniyah takmiliyah program. However, this initial challenge is further compounded by the second dualism between public and private educational institutions. General education is often associated with state-run educational institutions (Muthmainnah, Nurmala, Siswantara, & Rachmayanti, 2021), while religious education is typically associated with community-based private institutions (Priatna, 2020; Susilo, Dewantoro, & Yuningsih, 2022). This dualistic dilemma engenders a more complex debate, leading to perceptions of unequal treatment between public and religious, state and private educational institutions (Irwandi, 2017; Slamet, 2014). Religious education, under the purview of the Ministry of Religion, is sometimes perceived as marginalized compared to general education, which falls under the Ministry of National Education. Further assumptions arise, such as the contention that Indonesia's decentralized education system only applies to general education, while education with Islamic features, like diniyah takmiliyah education, remains centralized under the Ministry of Religion (Slamet, 2014).

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Conversely, optimistic perspectives also emerged. Muhaemin (2012) posits that the implementation of Law No. 20 of 2003 could potentially revitalize Islamic education in Indonesia, particularly *diniyah takmiliah* education. This perspective is supported by the subsequent enactment of new regulations specifically addressing Islamic education, including Government Regulation Number 55 of 2007 concerning Islamic education implementation and Regulation of the Minister of Religion (PMA) Number 13 of 2014 concerning Islamic religious education institutions within the formal and non-formal education sectors. Following this emphasis on *diniyah takmiliah* education, numerous municipal governments in Indonesia enacted similar regulations. For instance, Kudus Regency implemented Regional Regulation Number 3 of 2013 (Madrasah Diniyah Takmiliah, 2013), Medan City enacted Regional Regulation Number 5 of 2014 (Wajib Belajar Madrasah Diniyah Takmiliah Awaliah, 2014), Pasuruan Regency enacted Regent Regulation Number 21 of 2016 (Wajib Belajar Pendidikan Madrasah Diniyah, 2016), Banyuwangi Regency enacted Regional Regulation Number 7 of 2017 (Wajib Belajar Madrasah Diniyah Takmiliah, 2017), the Magetan Regent of East Java enacted Magetan Regency Regional Regulation Number 2 of 2018 (Sabiq, 2020), and the Sumenep Regent published Regional Regulation Sumenep Regency Number 4 of 2020 concerning the implementation of *diniyah takmiliah*.

These regional and regency-level policies collectively advocate for the integration of *diniyah takmiliah* education within the framework of formal educational institutions. The legal foundation for this integration in East Java is established in Regional Regulation of East Java Province Number 9 of 2014, which defines *diniyah takmiliah* as non-formal Islamic religious education designed to supplement students' general education (SD/MI, SMP/MTs, and SMA/SMK/MA). Further delineating the process, Decree of the Directorate General of Islamic Education No. 7131 of 2014 provides detailed procedures for organizing *diniyah takmiliah* in integration with formal educational institutions. One such approach is to hold Madrasah *diniyah takmiliah* sessions within the premises of formal educational institutions such as SD/MI, SMP/MTs, and SMA/SMK or their equivalents. This model exemplifies a practical approach to institutional integration, effectively merging *diniyah takmiliah* education (non-formal religious education) with formal education.

Building upon this definition, the present study seeks to investigate the integration model of *diniyah takmiliah* and formal education in Indonesia, with a particular focus on the province of East Java. The exploration of this integration model is of paramount importance as it can elucidate a deeper understanding of how religious education, specifically *diniyah takmiliah* education, can be fortified and integrated within the framework of Indonesia's national education system. Moreover, the conceptualization of the *diniyah takmiliah* integration model in this research reflects the practical implementation of such integration within East Java, thus suggesting that this model could serve as a valuable blueprint for other regions seeking to enhance the integration of *diniyah takmiliah* education with their formal education systems.

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The rationale for selecting East Java province stems from its having the highest number of *diniyah takmiliyah* compared to other provinces. As of 2023, East Java has 3,1748 *diniyah takmiliyah*, exceeding the numbers in West Java (3,1044) and Central Java (13,806). Additionally, two districts within East Java, Pasuruan and Sumenep, were selected as research subjects. Pasuruan Regency has been designated a referral district for the implementation of *diniyah takmiliyah* integrated with formal educational institutions (Pemerintah Kabupaten Pasuruan, 2017). Furthermore, Pasuruan has been the focus of substantial exploratory research on *diniyah takmiliyah* (Ahmad, Oktavia, & Churrohman, 2020; Fathurrohman, 2019; Fuadiba, 2020; Hasan & Muslim, 2021). Conversely, Sumenep district was chosen due to its establishment of both a regent regulation (Regent Regulation No. 15 of 2016) and a regional regulation (Regional Regulation No. 4 of 2020) concerning *diniyah takmiliyah*.

Furthermore, this concept of institutional integration has been explored in two prior studies. Zainiyati (2013) examined the paradigm of institutional and curriculum integration, focusing specifically on institutional integration. However, the operational mechanics of this particular type of institutional integration warrant further investigation. The second study, conducted by Fathurrohman (2019), delved into integration through synergistic policies, highlighting the potential for collaboration among multiple institutions for mutual benefit. However, the technical dynamics underpinning this synergy remain unexplored.

## RESEARCH METHOD

The objective of this study is to formulate a model for integrating *diniyah takmiliyah* education with formal educational institutions, specifically focusing on primary schools. Consequently, this study employs a case study research design within a political research framework to elucidate the operational mechanisms of the integration model between *diniyah takmiliyah* institutions and formal elementary education institutions in East Java, Indonesia. As Nugroho (2012) suggests, political research can generally adopt either an institutional or actor-oriented approach. The institutional approach emphasizes human-made institutions, while the actor approach focuses on human actors as agents of change.

Within this study's context, the institutional approach encompasses district/city government entities in Pasuruan and Sumenep, the Ministry of Religion, and LP Ma'arif (specific to the Pasuruan region). It also includes formal primary education institutions and *diniyah takmiliyah* institutions. The actor approach encompasses individuals within each institution. In government institutions, this refers to regional heads, while in implementing parties, it refers to SD/*diniyah takmiliyah* school principals, teachers, and other relevant personnel.

Data collection for this study was conducted through a comprehensive review of relevant documents, including policy regulations governing the integration of *diniyah takmiliyah* with formal primary education institutions in the East Java districts of Sumenep and Pasuruan. This encompassed the Madrasah Diniyah Regent Regulation Number 15 of 2016 and the Madrasah Diniyah Regional Regulation Number 4 of 2020 (applicable in Sumenep), as well as the Pasuruan Regent Regulation Number 21 of 2016. Supplementary documents related to this integration, such as offline and online news

articles, official district/city government websites, and other pertinent sources, were also examined. In addition to document analysis, in-depth interviews were employed to elicit detailed perspectives from relevant stakeholders. A minimum of eight respondents were interviewed, including the heads of the education departments in Sumenep and Pasuruan, coordinators of PD Pontren in both districts, the head of LP Ma'arif Pasuruan (responsible for policy execution regarding diniyah takmiliah integration in Pasuruan), and three representative teachers from diniyah takmiliah madrasahs (two from Sumenep and one from Pasuruan).

Data analysis adhered to the systematic processes outlined by Miles, Huberman, & Saldaña (2014), encompassing data condensation, data display, and conclusion drawing. Data condensation involved the methodical categorization and thematic grouping of similar data extracted from relevant document reviews and interview transcripts. This categorization focused on three primary dimensions: the delineation of regulations governing *diniyah takmiliah* integration within formal education in Sumenep and Pasuruan, the identification and roles of relevant stakeholders, and an analysis of the diverse technical modalities employed in the implementation of *diniyah takmiliah* integration within formal education. The condensed data were then presented in tabular and graphical formats to enhance clarity and facilitate comprehension. The final phase of conclusion drawing aimed to synthesize the constructs of the two distinct models of *diniyah takmiliah* integration observed in Sumenep and Pasuruan, contributing to a nuanced understanding of the phenomenon under investigation.

## RESULTS AND DISCUSSION

### Sumenep Regency

The Sumenep district yielded several noteworthy findings. Initially, Regent Regulation Number 15 of 2016 mandated the integration of diniyah takmiliah within formal educational institutions. This regulation outlined three distinct modalities for the implementation of diniyah education in public elementary, junior high, and high schools: 1) classroom-based instruction, 2) instruction within designated prayer rooms, and 3) instruction within established madrasah diniyah takmiliah settings. Further details regarding these modalities are elucidated in the Technical Guidelines of Madrasah Diniyah Regent Regulation Number 15 of 2016 (see accompanying table).

**Table 1.** Procedures for Implementing the Mandatory Madrasah Diniyah Stipulated in Regent Regulation Number 15 of 2016

Regulation	Place of Implementation	Implementation
Regent Regulation (Perbup) Number 15 of 2016	Public Schools	Bringing teachers from MDT (Madrasah Diniyah <i>Takmiliah</i> ) and facilities from schools
	Mushalla	Implemented by MDT in full
	MDT	Implemented by MDT in full

Source: Technical Guidelines Procedures for the Compulsory Implementation of Madrasah *Diniyah* Regent Regulation Number 15 of 2016

A comprehensive analysis of the procedures for implementing mandatory madrasah diniyah, as stipulated in Regent Regulation Number 15 of 2016, reveals that *Madrasah Diniyah Takmiliyah* assumes a central role in the execution of this regulation. However, with the implementation of Regional Regulation No. 4 of 2020, the primary responsibility of *Madrasah Diniyah Takmiliyah* becomes more narrowly defined. The subsequent table elucidates the comprehensive approach to implementing *diniyah* education as per this newer regulation.

**Table 2.** Procedures for Implementing the Mandatory Madrasah Diniyah Stipulated in Regional Regulation Number 4 of 2020

Regulation	Place of Implementation	Implementation
Regional Regulation (Perda) Number 4 of 2020	Fully in Public Schools	Implemented by public schools in full
	Public Schools	Bringing in teachers from MDT and facilities from schools
	MDT	Cooperation with MDT is based on a Memorandum of Understanding (MoU). Administrative oversight remains under the jurisdiction of the state school, not the MDT..

Source: Technical Guidelines Procedures for the Compulsory Implementation of Madrasah *Diniyah* Regional Regulation Number 4 of 2020

As Table 2 indicates, madrasah diniyah takmiliyah does not have a designated role in Regional Regulation Number 4 of 2020. This exclusion stems from the fundamental distinction in institutional oversight: the Regional Regulation (Perda) is enacted by the Regional or Regency Government, with the education office as its administrative authority. Conversely, madrasah diniyah takmiliyah falls under the direct jurisdiction of the Ministry of Religion. Consequently, the Sumenep Regency education office bears the responsibility for the mandatory diniyah program, rather than the Ministry of Religion, despite the latter's educational program also bearing the name diniyah takmiliyah.

This interpretation is supported by the following statement from the PD Pontren department within the Sumenep Regency Ministry of Religion, the entity responsible for overseeing the implementation of diniyah takmiliyah:

“The mandatory *diniyah* regulation based on Regional Regulation Number 4 of 2020 is purely a Regency Government program. This implies that, in this scenario, the Ministry of Religion, which also has a *diniyah takmiliyah* program, supports the validity of these regional rules by institutional synergy and resources.” (Interview with the Ministry of Religion of Sumenep Regency, PD Pontren section).

Based on this analysis, it can be concluded that Regional Regulation No. 4 of 2020, concerning the implementation of diniyah education, explicitly mandates integration solely through institutional and resource synergies. Diniyah Takmiliyah endeavors to achieve institutional synergy through collaborative efforts formalized through a

Memorandum of Understanding (MoU), while resource synergy is pursued through the provision of teaching personnel to bolster the legitimacy of the regional regulation.

Within established theoretical frameworks, integration through institutional and resource synergies can manifest in various ways. Institutional synergy may take the form of single-sector integration, as defined by Harman & Harman (2003), wherein multiple institutions within the education sector collaborate. This sector integration can encompass both horizontal and vertical dimensions (Persaud, 2016). Resource synergy, on the other hand, may be achieved through the integration of diverse academic profiles across institutions (Harman & Harman, 2003). In this specific context, general disciplines are taught in public elementary schools, while religious disciplines are taught in diniyah takmiliah. The integration of diverse academic profiles thus creates opportunities for both horizontal and vertical integration.

Based on Regional Regulation Number 4 of 2020 in Sumenep Regency, the following figure illustrates the model for integrating diniyah takmiliah with formal educational institutions.

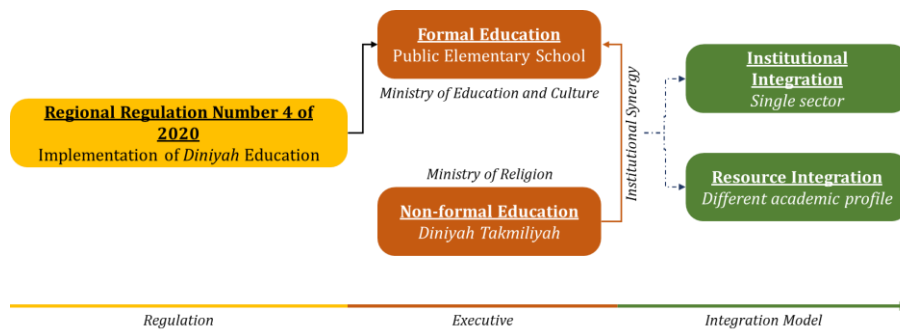


Figure 1. Model for the Integration of Diniyah Takmiliah with Formal Educational Institutions in Sumenep Regency

### Pasuruan Regency

Previous dissertation research, notably the study conducted by Fathurrohman (2019), illuminated the nature of integration between diniyah takmiliah and formal educational institutions in the Pasuruan region. Fathurrohman's (2019) work visually depicted the salient findings and conclusions regarding this synergistic policy approach.

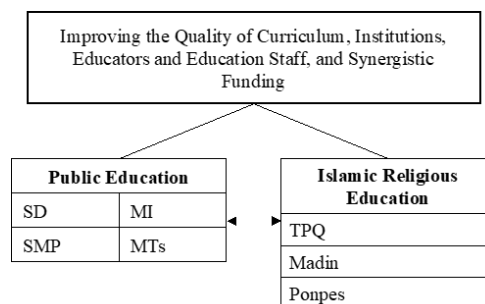


Figure 2. Strategic Policy Framework for Integrating General Education and Islamic Religious Education in Pasuruan Regency

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The Pasuruan district implements a comprehensive integration of general education with Islamic religious education through a mandatory *diniyah* curriculum, as legally mandated by District Head Regulation No. 21 of 2016. However, the successful realization of this integration necessitates robust and meticulous managerial preparations.

“As of now, there are around 1,649 madrasahs *diniyah takmiliah* operational in the Pasuruan area. This many madrasahs necessitates effective governance. As a result, we, the Ministry of Religion, as the entity in charge of this madrasah, are collaborating with the local government, namely the education office, to consider how to administer and grow it. Finally, we discovered that this madrasah *diniyah* is a community-based educational establishment. To properly engage in the mandated *diniyah* program, we also require a community-based legal body capable of managing the madrasah *diniyah*. LP Ma’arif is the legal entity.” (Results of interviews with staff of Head of Pontren Ministry of Religion, Pasuruan Regency)

The education office in the Pasuruan district reiterated the aforementioned position of the Ministry of Religion:

“This necessary *diniyah* program is a mandate from the Regional Regulation, which is confirmed in detail in the Regional Regulation. As a result, we unquestionably have responsibility for developing this program and the *diniyah* institution, because it all falls under the purview of the Pasuruan district administration. We have obligations such as providing honoraria/incentives to madrasah *diniyah* instructors and developing institutional facilities. The Ministry of Religion, on the other hand, is responsible for the *diniyah* institution’s direction and operating permissions since the *diniyah* is governed by the Ministry of Religion. However, we believe it is necessary to incorporate a community group in the development of managerial elements and curriculum. The explanation is simple: *diniyah* is a community-based education program, hence community-based institutions must also be involved in administration and execution. LP Ma’arif is the institution in dispute. Aside from that, LP Ma’arif was the original proponent of the required madrasah *diniyah* program in Pasuruan.” (Results of interviews with the Head of the Basic Education Section of the Pasuruan District Education Office)

Based on the findings of these interviews, it is evident that the synergy between general and Islamic religious education in the Pasuruan district involves a third-party entity. This entity assumes responsibility for administrative governance and management, acting as a parent foundation for Islamic institutions lacking independent foundations and providing essential curricular resources, such as teaching materials and learning assessment tools.



Consequently, the integration of diniyah within formal educational institutions in the Pasuruan district manifests as a form of integrated supply chain management. While integration in Sumenep is characterized by a combination of institutional (single-sector) and resource (differentiated academic profiles) integration, the Pasuruan model is more streamlined. It can be conceptualized as a unified third-party management integration model that encompasses both institutional and resource integration. This model is illustrated below:

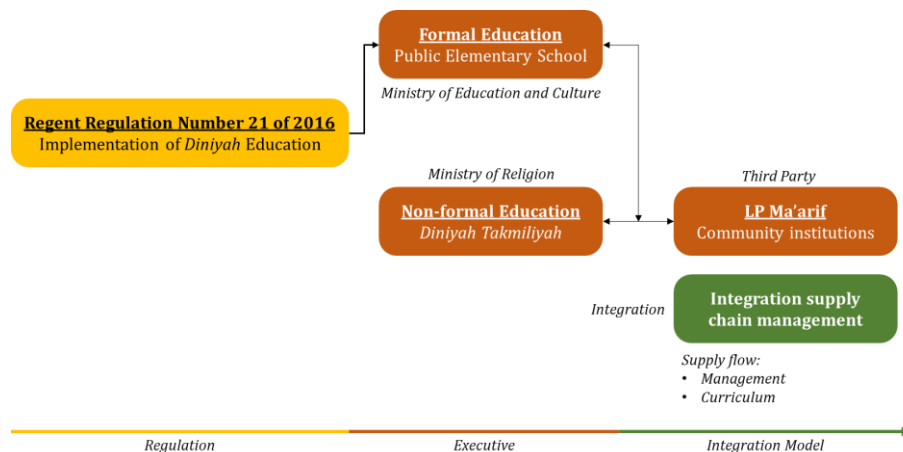


Figure 3. Conceptual Model for the Integration of Diniyah Takmiliah within Formal Educational Institutions in Pasuruan Regency

This type of supply chain management integration is not a novel concept, although it is more commonly associated with business enterprise management (Birasnav & Bienstock, 2019; Mohammadi, Jämsä-Jounela, & Harjunkoski, 2019; Munir, Jajja, & Chatha, 2020). However, the literature demonstrates that variations of this integration model have been successfully applied within the educational domain (Habib, 2014; Li, 2020; Marbun, Effendi, Lubis, & Pratama, 2020; Pathik, Chowdhury, & Habib, 2012). The subsequent discussion will provide a comprehensive analysis of this integration model as implemented within the specific context of education.

## Discussion

This integration paradigm has been explored in two prior studies. Fathurrohman (2019) proposed integration through synergistic policies, while Zainiyati (2013) presented a model of institutional and curriculum integration. However, the findings of the present study suggest two distinct integration models: (1) a single-sector integration model with differentiated academic profiles in the Sumenep district, aligning with the broader concept of synergistic integration (Harman & Harman, 2003), and (2) a management and curriculum integration model in the Pasuruan district, consistent with the framework of third-party supply chain management integration (Habib, 2014; Li, 2020; Marbun, Effendi, Lubis, & Pratama, 2020; Pathik, Chowdhury, & Habib, 2012).

While the integration models identified in this study share similarities with the models proposed by Zainiyati (2013) & Fathurrohman (2019), they are more nuanced and context-specific. The single-sector integration model with differentiated academic

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profiles in Sumenep aligns with Zainiyati's institutional and curriculum integration model, emphasizing collaboration and resource sharing within the education sector. However, this study's findings reveal a more nuanced understanding of this model in the Sumenep context. Here, institutional integration manifests as formal cooperation between elementary schools and *diniyah takmiliyah* institutions, facilitated by a Memorandum of Understanding (MoU). Additionally, resource integration involves the provision of teaching personnel from *diniyah takmiliyah* institutions to formal educational institutions. This model can be classified as single-sector integration, as both types of institutions operate within the education sector (Harman & Harman, 2003). The findings regarding single-sector integration in this study can build upon Zainiyati's (2013) prior research, which exclusively focused on institutional integration. While institutional integration can manifest as either single-sector or cross-sector integration, the growth of educational institutions can also be achieved through cross-sector integration, involving synergies between educational institutions and institutions outside of the education sector itself (Blanken, Mathissen, & Van Nieuwenhuixen, 2022). Examples of cross-sector integration include Ireland, where educational institutions and churches integrated to mitigate conflict between Catholics and Protestants (Duffy & Gallagher, 2014), and Australia, where universities merged with health institutions in 1988 to address financial challenges (Meek, 1988). More recently, Australia and the Philippines have explored cross-sector integration between educational institutions and the Global Skills Group (GSG) Training Institute to produce globally competent graduates (Cameron & O'Hanlon-Rose, 2011). Finland has also implemented cross-sector integration between educational institutions and workplaces to reduce moral vulnerability among young people (Brunila, Ikävalko, & Kurki, 2016).

However, numerous instances of single-sector integration also exist. In London, for example, universities have been fully integrated into larger institutions to reduce the number of higher education providers (Locke, 1985). In Australia, from 1981 to 1987, several tertiary institutions, such as teacher education colleges, merged with other, more financially stable higher education institutions (Harman, 1981). In Norway, regional colleges were amalgamated with specialized nursing and teacher training colleges in the early 1990s, resulting in a consolidation of 98 colleges into 26 public colleges (Norgård & Skodvin, 2002).

The findings of this study align more closely with single-sector integration. In Sumenep Regency, Regional Regulation Number 4 of 2020 mandates the implementation of mandatory *diniyah* through the integration of formal educational institutions and *diniyah takmiliyah* institutions, both of which operate within the education sector. This integration is facilitated through agreements or Memorandums of Understanding (MoUs). However, unlike the aforementioned international examples, the single-sector integration in Sumenep does not result in the dissolution of either institution. Both formal educational institutions and *diniyah takmiliyah* institutions continue to exist and operate independently despite their integration.

Historically, single-sector integration has often served as a solution to institutional challenges. In Australia, for example, single-sector integration was implemented to address issues of economic stability, while in London, it was employed to streamline the

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number of tertiary institutions deemed ineffective. Similarly, Norway adopted single-sector integration to achieve similar goals. In the context of this study, single-sector integration emerged as a solution to the concern among diniyah takmiliyah institutions that regional regulations aimed to abolish their existence. Consequently, the Sumenep Regency Government adopted a discretionary policy, facilitated through a Memorandum of Understanding (MoU), to enable collaboration between formal educational institutions and Madrasah Diniyah Takmiliyah (MDT), thereby fostering single-sector integration.

In addition to single-sector integration, this study's findings also shed light on an alternative integration model: resource integration in the form of multiple academic profiles. This integration refers to the collaboration between institutions with diverse academic disciplines (Harman & Harman, 2003). In the context of the present study, resource integration manifested as the provision of MDT teachers and facilities to formal educational institutions to implement the mandatory early childhood education program stipulated in Regional Regulation No. 4 of 2020.

Frølich, Trondal, & Caspersen (2016) found that collaboration between educational institutions and institutions from other academic disciplines can strengthen regional work-life relevance, enhance research collaboration potential, and improve linkages between studies, economics, and management. Lotkowski, Robbins, & Noeth (2004) similarly noted that integrating multiple academic profiles can yield benefits such as increased institutional confidence and enhanced capacities. However, Harman & Harman (2003) cautioned that this approach may leave certain tasks unfulfilled, such as service support and organizational flexibility.

In practice, the integration of distinct academic profiles, as evidenced by the research findings, manifests as resource integration. Specifically, MDT integrates its resources, primarily in the form of qualified teaching personnel, into regular elementary schools to facilitate the implementation of the mandatory diniyah program. These resources possess a distinct academic character, differentiating them from those typically found in traditional educational institutions. Notably, the concept of integrating diverse academic profiles often extends to the realm of curriculum integration in various studies (Aljawarneh, 2020; Bull & Newell, 2009; Kori, Pedaste, & Must, 2018), the findings of Zainiyati (2013) reveal a different type of curriculum integration, characterized by a similar academic profile, such as the integration of the Sunan Ampel Al-Aly ma'had program with the UIN Malang curriculum. Thus, the findings regarding the integration of diverse academic profiles in the context of resource integration in this study warrant further investigation.

Furthermore, the research findings in Pasuruan Regency have revealed a supply chain management (SCM) integration model. While SCM integration is predominantly associated with business enterprise management (Birasnav & Bienstock, 2019; Mohammadi, Jämsä-Jounela, & Harjunkoski, 2019; Munir, Jajja, & Chatha, 2020), variations of this model have been successfully applied within educational contexts (Habib, 2014; Li, 2020; Marbun, Effendi, Lubis, & Pratama, 2020; Pathik, Chowdhury, & Habib, 2012). In the Pasuruan context, SCM integration refers to the integration between formal educational institutions and diniyah takmiliyah institutions through the involvement of a third-party entity, LP Ma'arif. This entity assumes responsibility for administrative oversight and functions as a parent foundation for diniyah takmiliyah

organizations that lack independent foundations. Additionally, LP Ma'arif provides essential curriculum resources, including teaching materials and learning assessment tools, for the mandatory diniyah program in the Pasuruan district.

The integrated supply chain management (SCM) model comprises three components: (1) suppliers, (2) service providers, and (3) consumers (Pathik, Chowdhury, & Habib, 2012). As Habib & Jungthirapanich (2008), suppliers can include providers of human resources, financial resources, and non-human resources such as assets, instructional resources, and research initiatives. Service providers may offer knowledge management (KM) and total quality management (TQM) services, among others. In the Pasuruan context, LP Ma'arif can be conceptualized as both a supplier of human and non-human resources and a provider of knowledge management services, facilitating the integration of diniyah takmiliyah education within the formal education system. The body of research specifically addressing the implementation of Supply Chain Management (SCM) integration within the educational context remains limited. To date, only Al-Turki, Duffuaa, & Ayar (2008) research has examined the Saudi state's integration of SCM with Saudi Aramco (an oil corporation) as a source of funding and non-human resources in the form of facilities. The majority of SCM integration research focuses on business applications (Birasnav & Bienstock, 2019; Mohammadi, Jämsä-Jounela, & Harjunkoski, 2019; Munir, Jajja, & Chatha, 2020), while studies on SCM integration in education are primarily limited to literature reviews or theoretical analyses (Habib, 2014; Habib & Jungthirapanich, 2008; Li, 2020; Marbun, Effendi, Lubis, & Pratama, 2020; Pathik, Chowdhury, & Habib, 2012). Consequently, there is a need for further empirical research on the implementation of SCM integration within the practical realm of education.

The figure below illustrates the model for integrating diniyah takmiliyah with formal educational institutions in the Indonesian province of East Java, providing a visual representation of the findings of this study.

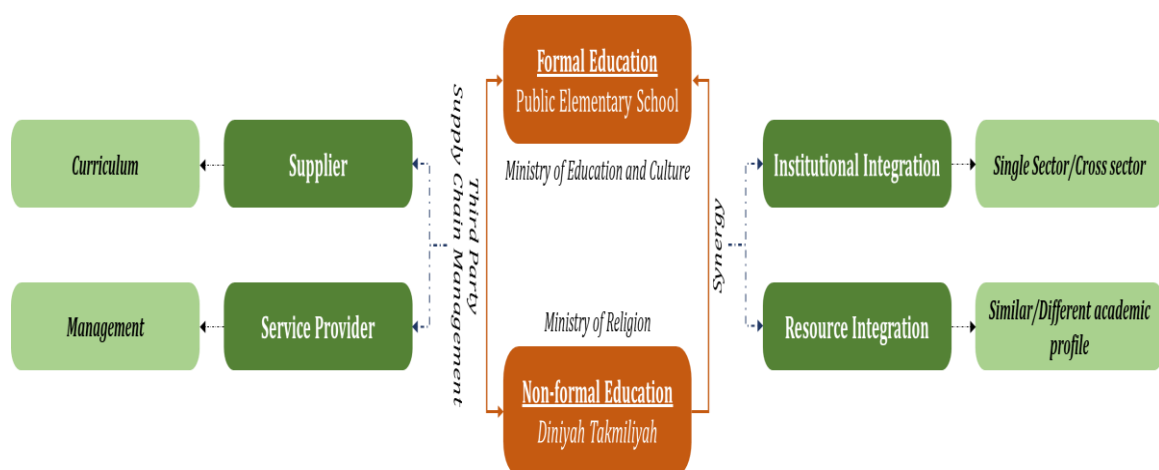


Figure 4. Model for the Integration of Diniyah Takmiliyah with Formal Educational Institutions in East Java, Indonesia

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## CONCLUSION

This study expands upon Zainiyati's (2013) findings on institutional integration models, specifically the options of single-sector or cross-sector integration within the framework of synergistic integration. Additionally, it corroborates Fathurrohman (2019) research on strategic policies through third-party integration, which focuses on the supply chain management integration model. However, this study does not examine the efficacy or conduct a factorial analysis of the two resultant integration models, namely single sector/cross-sector institutional integration and supply chain management integration, as these analyses necessitate further investigation. .

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