Transformation of Education System of the Pesantren in Indonesia from the Dutch Colony to Democratic Era

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Abstract

This study delves into the transformations within the Islamic Boarding School (Pesantren) education system over time and their implications for the learning methods employed by students. Guided by a case study research design with a descriptive qualitative approach, this research focuses on two of the oldest Islamic boarding schools: Tegalsari Ponorogo Islamic Boarding School and Jamsaren Solo Islamic Boarding School. Key participants, comprising leaders and administrators well-versed in the history and evolution of pesantren education and learning systems since their inception, serve as the primary data sources. The findings are structured into three parts. The initial segment unveils that Tegalsari Ponorogo pesantren originally functioned as a center for non-formal education, characteristic of Salafi pesantren. As time progressed, the establishment of Modern Darussalam pesantren introduced contemporary formal education with regular and intensive programs, marking a departure from traditional non-formal education associated with Salafi pesantren. In the second part, the study highlights the evolution of Jamsaren Solo pesantren education, which transitioned from classical education methods to a modern formal education approach employing a classroom system. The third part elucidates that the transformation in pesantren education has contributed to a reduction in the learning gap. Students now acquire not only religious knowledge but also a range of general disciplines, leading to notable achievements. In summary, the educational transformation has impacted the learning system, facilitating the acquisition of knowledge and skills relevant to contemporary times. The study underscores the need for collaboration between the government and pesantren leaders to fortify the pesantren education system. This collaboration aims to cultivate Indonesian pesantren capable of producing young professionals who contribute significantly to the nation, religion, and state.

Keywords: Islamic boarding school, learning, transforming education.

Introduction

The transformative journey of education holds profound implications for human life, aiming to evolve traditional learning models into modern ones that equip students for success in the future. Effective education policies and management play a crucial role in fostering the development of generations into an educated and high-quality society (Shaturaev, 2021). However, the evolution of education is not without challenges. The changing landscape poses formidable obstacles for the

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global education sector, and Indonesia's educational transformation reflects an extraordinary struggle. While the ongoing education transformation has propelled the system to become more advanced and developed, it has concurrently given rise to widening educational gaps influenced by various factors. The multifaceted challenges influencing educational transformation encompass factors such as the Covid-19 pandemic, poverty, infrastructure, teacher competence, and the adoption of science and technology (Tavernise, 2012; Seebacher, 2022; Young et al., 2021; Van Maarseveen, 2021). In response, educational institutions have embraced innovative curricula that align with technological advancements and the evolving requirements of the contemporary educational landscape. This adaptability extends beyond public schools, as even pesantren education has adjusted to the dynamic shifts of the times and the demands of the future.

Education's evolution into the modern era reflects the proactive measures taken by educational institutions to remain competitive and adapt to the ever-changing developments of the times. Pesantren education, in particular, has played a significant role in contributing to the attainment of educational goals (Akour & Alenezi, 2022; Cahaya et al., 2022; Niemi, 2021). The prominent Islamic boarding schools (pesantren) in Indonesia boast a rich history, spanning from the Dutch East Indies era to the era of digitization of the Jokowi government. The educational system has experienced substantial transformations overtime, with a notable aspect being the modernization of learning patterns and models within formal pesantren. Recent studies highlight the increased demand for modern pesantren within communities. The innovative transformation of learning management, coupled with superior educational programs and an Islamic modernization-based curriculum, contributes to enhancing the global competitiveness of pesantren (Fathurrochman et al., 2020). The unique learning methods, focusing on instilling religious knowledge and various disciplines, give Indonesian pesantren a distinctive position, particularly among Muslim communities (Muhajir, 2022; Roqib, 2021). Nevertheless, contrasting evidence suggests that, in Indonesia, the prevailing perception associates pesantren more closely with being a non-formal education institution primarily focused on religious studies. Furthermore, instances have been documented that depict pesantren as susceptible to issues related to radicalism (Supa'at & Muslim, 2023). As a result, there is a prevalent public concern that perceives these institutions as potentially less supportive in preparing children for the future. However, it is noteworthy that numerous larger pesantren have expanded their educational offerings to include formal education. Examples include formal *Diniyah* Education and *Mu'adaalah* Education Unit at the Ula level (equivalent to

Elementary School/*Madrasah Ibtidaiyah*), *Wutsha* (equivalent to Junior High School/Madrasah Tsanawiyah), and Ulya (equivalent to High School/*Madrasah Aliyah*), and *Ma'had Aly* (at the higher education level) (Arifin et al., 2023). A comprehensive literature review indicates that numerous pesantren have encountered challenges, such as declining enrollment, teacher-related issues, and setbacks. Contributing factors include difficulties in adapting to the new education system, leadership patterns, financial constraints, socio-cultural influences, and external cultural pressures (Asse et al., 2023; Habibi et al., 2018; Khoiri & Aryati, 2021; Muzammil et al., 2022). Notably, the historic Tegalsari Ponorogo pesantren and Jamsaren Solo pesantren in Central Java have enjoyed a prestigious status, producing notable figures for the Indonesian nation. However, the transformation of education initiated by their successors may not necessarily maintain the esteemed reputation of pesantren due to the changes in the modern and digital eras. Contemporary studies play a crucial role in addressing three fundamental questions concerning education: why schools should change, what the change should entail, and how these changes can be implemented. These questions are integral to the ongoing efforts aimed at transforming education in Indonesia. A high-quality education system should ultimately produce graduates capable of creative thinking, innovation, adaptability to change, and effective problem-solving. The research findings indicate that pesantren, historically a center for studying sacred texts, Javanese knowledge, and the supernatural, have significantly contributed to Indonesia's independence and the evolution of Islamic education (Hasanah et al., 2023; Howell, 2014).

In the modern era, *Pesantren* has actively contributed to the objectives of national education, emphasizing the cultivation of competitive graduates with diverse academic accomplishments (Thahir, 2014). In contrast to previous studies, this research delves deeply into the fundamental changes associated with educational and learning practices within pesantren. The aim is to generate fresh insights into how evolving education and learning approaches in pesantren over time can significantly influence the future trajectory of students.

Research Questions

Given the aforementioned background, the research questions that will be explored to provide answers are as follows:

1. What transformations have occurred in the learning system at Tegalsari Ponorogo pesantren from the Dutch East Indies period to the present era?

2. How has the transformation been implemented in the education system at Jamsaren Solo pesantren from the Dutch East Indies to the present era?

3. What impacts have the transformations in the education system had on student learning at Tegalsari Ponorogo pesantren and Jamsaren Solo pesantren?

Literature Review

Education Transformation

Education transformation refers to a dynamic process of change within the education system, driven by the engagement of human resources, including educators and labor, with the aim of achieving educational goals in a superior, creative, and innovative manner (Odularu et al., 2022). This transformative process is closely intertwined with modern educational advancements, incorporating positive nuances through the integration of science and technology into teaching and learning methods (Marais, 2023; Okwara & Henrik Pretorius, 2023). The pivotal role of teachers is underscored as they play a crucial part in the success of the transformation undertaken by educational institutions (Fisher, 2006; Mokone & Setlalentoa, 2023). Education transformation encompasses changes in leadership styles, educational curricula, learning methods, and the overall educational culture (Darling-Hammond, 2010; Waychunas, 2022).

The study explains that education transformation focuses on five dimensions, including: 1. Restructuring Components: This involves reorganizing elements in education such as management and human resources to ensure success. 2. Process Enhancement: Making changes and evolving existing business processes to enhance adaptability. 3. Implementation Assistance: Providing support during the execution of the newly established system. 4. Organizational Revitalization: Making changes and redeveloping organizational structures, levels, positions, and groups within the institution. 5. Cultural Change Support: Offering advice and assistance during the process of cultural changes within educational institutions (Wilson & Kiely, 2003). Education transformation necessitates educational institutions cultivate adaptability and integrate their resources as vital assets. This transformational process may involve transitioning from traditional learning methods to more modern approaches, such as the incorporation of online learning methods (Picciano et al., 2010). The study conducted by Li et al. (2011) discusses the substantial transformation of education in China since 1999. This transformation is driven by global impacts, leading to new commitments to resources and substantial alterations to primary and secondary education systems.

Notably, the educational reforms in the UK have served as inspiration for exemplary schools globally. It is intriguing to observe that changes in the educational curriculum also influence the design of educational buildings, fostering a more comprehensive teaching and learning process (Leiringer & Cardellino, 2011). In Indonesia, the long-term transformation of education is guided by three priority programs: national assessment, education report card and Merdeka curriculum. These initiatives are dedicated to enhancing the characteristics and competencies of all learners. Within the realm of pesantren education, transformation is being realized through the development of e-learning-based teaching methods. The utilization of e-learning by educators in pesantren has demonstrated its potential to improve the quality of teaching and learning in Islamic education (Fauzi et al., 2018). Additionally, another study perceives the transformation of pesantren education as an effort to preserve religious teachings and traditions (Asnawi, 2016).

Pesantren Education System

The education system comprises a series of strategies or methods employed in the teaching and learning process to achieve educational success and facilitate the development of students' potential. It plays a crucial role in shaping individuals for the labor market, garnering special attention from stakeholders who aim for effectiveness and efficiency. The education system can be classified into two typologies: first, as a provider of nationally equivalent educational standards (standardization); and second, through selection procedures in the system (stratification) (Allmendinger, 1989). The development of equitable education systems is considered essential for schools in developed countries. Elements of the education system encompass objectives, curriculum, learning materials, learning methods, educators, students, infrastructure, tools, approaches, and other factors that collectively contribute to the success of the educational process (Ainscow et al., 2013). The literature review highlights that the Pesantren education system is primarily oriented towards moral education through the deepening of Islamic principles. Key characteristics of pesantren education include the presence of kyai (respected religious figures/pesantren leaders), santri (students), mosques, cottages, and the study of classical books, which serve as foundational learning guides within pesantren. Notably, some Salafi pesantren are observed adopting an education system that integrates traditional and modernized learning patterns and models. The modifications implemented in these pesantren do not alter the fundamental characteristics of teachings and religious traditions imparted to students. Instead, the adaptations

primarily pertain to the learning methods, aligning them with contemporary practices (Arifin, 2022). Interestingly, large Islamic boarding schools that have achieved success with their education systems serve as exemplars for character education, influencing other modern pesantren in their developmental stages (Akbar et al., 2022). Nevertheless, some pesantren still adhere to traditional education systems, employing classical Islamic books such as the yellow book and incorporating recitation and istighosah in their learning methods (Muhaemin, 2014).

Pesantren **Tegalsari Ponorogo**

The original name of Pesantren Tegalsari is Pesantren Gebang Tinatar. It is situated in Setono village, Jetis District, Ponorogo Regency, East Java, Indonesia. Although the pesantren Tegalsari has historical roots dating back to 1700 AD, historical records indicate that it was formally founded in 1742 AD by Kyai Ageng Muhammad Besari, commonly referred to as Kyai Ageng. Kyai Ageng, the grandson of King Brawijaya V, who ruled Majapahit, was considered a saint with numerous karomah (divine blessings) and supernatural abilities. Pesantren Tegalsari holds the distinction of being the oldest pesantren in Java. The establishment of Pesantren Tegalsari aligns with the reign of King Paku Buwono II (PB II) in Surakarta from 1726 to 1746 AD.

Upon assuming power, PB II found the archipelago (formerly known as Indonesia) under the control of Dutch colonialists. Fleeing from the Sunan Kuning rebellion, PB II sought refuge in the Ponorogo area. Intrigued by Kyai Ageng's supernatural abilities, PB II sought assistance to quell the Sunan Kuning rebels. Subsequently, PB II became a santri (student) of Kyai Ageng, concurrently preparing for the impending conflict against Sunan Kuning.Collaborating with Kyai Ageng and his disciples, PB II successfully quelled the Sunan Kuning or Mas Gerendi rebellion. In gratitude, the pesantren Tegalsari area was granted perdikan status, signifying a tax-free region controlled by generations, bestowed by the king. Additionally, Kyai Ageng was appointed as an advisor to PB II. Subsequently, the pesantren Tegalsari flourished, attracting students from distinguished backgrounds, including noble families and individuals resisting Dutch colonial rule. Under Kyai Ageng's guidance, the pesantren Tegalsari not only imparted general Islamic teachings but also provided instruction in the Yellow Book, supernatural abilities, and state administration. The learning methods employed included *bandongan* or *wetonan* and sorogan. The *wetonan/bandongan* method, also known as the lecture method, involves students encircling the kyai while he imparts lessons through lectures. During the session, students read their respective

books, taking notes as the kyai explains the lesson. In West Java, this method is referred to as bandongan. Conversely, the sorogan method entails individual book study, where each student takes turns facing the kyai to read, explain, or memorize previously given lessons. The curriculum at pesantren Tegalsari encompassed a diverse array of subjects, including: 1. Nahwu (syntax) and sharaf (morphology): 2. Fiqh 3. Ushul Fiqh 4.Hadith 5. Tafsir 6. Tauhid 7. Tasawuf and ethics 8. Tarikh 9. Balaghah (the study of processing Arabic words or sentence structures and language styles that are both beautiful and convey clear meanings). Kyai Ageng passed away in 1773 AD, and his leadership was successively carried on by his sons: 1. Ilyas (1773-1800) 2. Kasan Yahya (1800-1820) 3. Kasan Besari (1820-1862) 4. Kasan Anom (1862-1873) 5. Kasan Kalipah (1873-1883). Historical records of pesantren Tegalsari illustrate its significant role in spreading Islam and nurturing freedom fighters. The pinnacle of pesantren Tegalsari's influence transpired during the leadership of Kyai Ageng's grandson, Kyai Kasan Besari. During this era, Kyai Kasan Besari mentored students who later emerged as key figures in the fight for independence, including R.Ng. Ronggowarsito, a renowned poet from the Surakarta Palace.

The education system at pesantren Tegalsari underwent transformation due to the stringent oversight imposed by Dutch colonialists. Facing increased scrutiny, students from pesantren Tegalsari dispersed to establish pesantrens on the north coast of Java. Kyai Kasan Besari's grandson, Kyai Kasan Kalipah, prepared his son-in-law, Sulaiman Jamal, to establish a Gontor hut in Gontor village, 3 km from Tegalsari. In the early 20th century, both Gontor and Tegalsari pesantrens experienced a decline due to intensified Dutch supervision and stringent teacher scrutiny. Fortunately, Kyai Sulaiman Jamal's grandsons—Ahmad Sahal (born 1901), Zainal Fanani (born 1905), and Imam Zarkasyi (born 1920)—underwent training in various pesantrens outside Ponorogo, revitalizing pesantren Gontor upon their return with a new management system.The newly established Gontor Pesantren, later named Darusalam Gontor Pesantren, adopted a blended management approach, combining elements of modern and traditional pesantren. The learning system transitioned from Sorogan and Wetonan to a more classical model, incorporating English and Arabic subjects for the students (santri). However, the pesantren faced a period of decline attributed to heightened Dutch supervision. The grandchildren of Kyai Kasan Besari, who included nobles and renowned Dutch officials, opted for a less active and open approach to preaching. In order to evade stringent Dutch oversight, they shifted towards Javanese teachings (*kejawen*) and altered their religious patterns. In the present day, Pondok Darusalam

Gontor has evolved into the largest pesantren in Indonesia under modern management. Conversely, Tegalsari Pondok is currently in a state of suspended animation. The original hut buildings of Tegalsari no longer exist, and Kyai Ageng's descendants have dispersed, pursuing various professions across different regions in Indonesia. The remaining structures include the mosque, the family grave of Kyai Ageng, and the old residence of Kyai Ageng. The transformation in education management has led to the establishment of an educational foundation overseeing Islamic elementary schools (MI), Islamic junior high schools (MTs), and Islamic high schools (MA).

The Pesantren Jamsaren Solo

Pesantren Jamsaren had its roots in the concerns of PB IV (1788-1820), the king of Sukarta. The king was troubled by the moral decay observed among noble families in the kraton, coupled with the persistence of Javanese Hindu customs, vices, and rampant crimes across the kingdom. In response to this, the king extended an invitation to ulama, Islamic scholars from the Banyumas district in the central Java province, including Kyai Jamsari, to serve as government scholars tasked with uplifting the moral standards of society and the royal family.Kyai Jamsari assumed the roles of an Islamic judge at the palace, the ulama of the kingdom, and the imam of the Surakarta palace mosque. In recognition of his services, Kyai Jamsari was granted a parcel of land on the south side of Ketaron to establish a prayer hall and a residence. The area, where Kyai Jamsari resided and where the surau (prayer room) was located, is now known as Kampung Jamsaren. The term "Jamsaren" denotes the initial foundation of the chronicle known as Jamsari.Kyai Jamsari led a dual life, fulfilling his duties at the Palace during the day and engaging in community-building activities at night. These activities included teaching Quranic recitation, delivering talks, and organizing various Islamic endeavors. Over time, Jamsaren gained renown as a prominent pesantren, following in the footsteps of Tegalsari pesantren. Much like Tegalsari, Jamsaren attracted students from Java, Sunda, Sumatra, Sulawesi, Nusa Tenggara, and Kalimantan. The curriculum at Jamsaren pesantren encompassed a diverse range of subjects, including syntax, morphology, Islamic jurisprudence, principles of jurisprudence, hadith, exegesis, monotheism, mysticism, ethics, history, and eloquence.Kyai Jamsari is revered as a a guardian of God, endowed with numerous karomah. The description of Kyai Jamsari's guardianship is inscribed on the artifact of the gate of the Keraton mosque, articulated in the following Javanese language:

> *Sanyata Kyai Jamsari Waliyullah kang minulya*
> *pratandane wus katonton*
> *Surakarta karo Demak iku rak ora cedhak*
> *Samengko kena ginulung*
> *Demak klawan Surakarta*

Translation
> Truly the honorable Kyai Jamsari Waliyullah
> the signs have appeared
> Surakarta and Demak are not close
> Nowdays you can roll it up
> Demak to Surakarta

Kyai Jamsari passed away during the reign of PB V (1820-1823 AD), and his son, Kyai Jamsari II, assumed leadership during PB VI's rule (1823–1830). Despite the challenging times, Kyai Jamsari II continued the educational legacy at Pesantren Jamsaren. The years 1825-1830 marked significant historical events, including Prince Diponegoro's rebellion in Yogyakarta and a rebellion led by BP VI in Surakarta. Although the Dutch suffered numerous casualties, Prince Diponegoro was eventually defeated, arrested, and exiled to Makassar, South Sulawesi, where he passed away. Subsequently, Kyai Jamsari II and the santri sought refuge, and Pesantren Jamsaren fell victim to Dutch raids, leading to its ruin and a hiatus lasting approximately 50 years. The educational revival at Jamsaren Pesantren commenced with Kyai Idris, a disciple of Kyai Mojo, a renowned warrior loyal to Prince Diponegoro. In 1878, Kyai Idris undertook the reconstruction of Jamsaren, which had been ravaged by Dutch raids. He erected a prayer space and two residential huts, laying the foundation for a renewed educational endeavor. Kyai Idris organized Quranic recitations and imparted teachings on various Islamic subjects, including syntax (nahwu), monotheism, jurisprudence (fiqh), Sufism, and the study of celestial phenomena (falaq science). These teachings were translated into Javanese from Arabic. The pedagogical approach continued to employ traditional techniques such as individual study (sorogan) and group lectures (bandongan). Students, or santri, hailed from diverse regions including Surakarta, Central Java, West Java, East Java, Sumatra, Kalimantan, Sulawesi, and Sumbawa. Initially, their numbers were in the tens, later growing to hundreds, and eventually reaching thousands. Kyai Idris, in his daily responsibilities, received support from his two sons-in-law, Kyai H. Abu Amar and Kyai Abdul Jalil. The students were under the supervision of the village head of the pesantren, the treasurer, and their respective guardians.

Jamsaren Islamic pesantren operates independently, without financial support or salaries from the government or external sources. Instead, the pesantren relies on donations from Kyai. Students are responsible for bringing their own supplies from home and preparing their meals while at the boarding school. Kyai H. Idris assumed leadership during his tenure as the Wedana teacher. In 1908, the construction of a prayer room marked the beginning of the mosque that stands at the site today. In 1913, a significant change occurred in the learning model, transitioning to a class system, with each class being led by a qori or aspiring kyai. Concurrently, PB X established Madrasah Mambaul Ulum, situated south of the Surakarta Palace Mosque, marking the only madrasa in Java at that time. The teaching staff comprised ulama from Surakarta, and Kyai H. Idris assumed the role of wedana guru (teacher leader). Subsequently, santri in the Jamsaren hut became students of Mambaul Ulum during the day and engaged in Quranic recitations at the Jamsaren hut in the evening.

In general, students reside in the Jamsaren hut for 5-15 years, some independently and others with their families. Numerous alumni from the Jamsaren Islamic Boarding School and Mambaul Ulum Madrasah have gone on to become community leaders, madrasa teachers, kyai, government officials, judges, and heads of religious courts, showcasing the diverse impact of their education. Following the passing of Kyai H. Idris in 1923, he was interred at the Haji Pajang Cemetery. Kiyai Abu Amar (honored with the title Kiyai Jamsari) assumed leadership at Jamsaren, while Mambaul Ulum was overseen by Kyai Abdul Jalil (given the title Kiyai R. Ngabehi Projowiyoto). The Jamsaren pesantren continues to thrive, managing not only boarding students but also elementary, middle, and high school-level institutions under the Foundation's purview.

Methods

Design

This research employs a case study design with a descriptive qualitative approach. A case study design focuses on a specific subject within the framework of a particular science, facilitating the acquisition of detailed and in-depth knowledge (Yin, 1994). This design proves highly suitable for investigating the evolution of the pesantren education system over time. The descriptive qualitative approach involves observation and interview techniques, conducted at two Islamic boarding schools: Pesantren Tegalsari (or Pesantren Gebang Tinatar Tegalsari) in Jetis district, Ponorogo Regency, and Jamsaren in the city of Surakarta, Indonesia. This qualitative approach aims to

vividly depict the empirical phenomenon of Salafiyah-style Islamic boarding schools' education system development by directly observing learning activities and the education system on-site.

Participants

This study involved a total of 20 participants, with 10 individuals from each pesantren. The participant selection criteria were dual-faceted. Firstly, leaders, management personnel, and teachers were chosen based on their knowledge of the pesantren's founding history and their understanding of changes in the education system and learning practices over time. Secondly, high-achieving students in their respective fields were included. The participants were purposively sampled, meaning they were selected based on the specific information depth required for the study's objectives.

Table 1
Participants of the Study

Criterion	*Pesantren* **Tegalsari**	*Pesantren* **Jamsaren Solo**
Number of participants	10	10
Female	1	-
Male	9	10
Age of Participants	Average over 17 years	Average over 17 years old
Under 17 years old	-	1
Between 17 years to 35 years	7	6
Over 35 years old	3	3
Participant Status		
Leader	1	1
Boarding School Management	2	3
Ustadz/Teacher	3	2
Santri/Students	4	4

Instruments

The research instruments for this study comprised observation grids and an interview guide, each meticulously detailed in the subsequent sections. Both instruments were exclusively designed by the researchers.

Observation Grid

The observation grid comprised 19 items, encompassing five objects of observation and 19 indicators. The distribution of the grid was structured as follows: (1) Implementation of the education system (five indicators), (2) Subjects of the educational system (four indicators), (3) Actualization of education (3 indicators), (4) Supporting factors of the education system (4 indicators), and (5) Inhibiting factors of the education system (three indicators). Before its

implementation for data collection, the grid underwent consultation with pesantren scholars to obtain expert judgment (Refer to Table 2).

Table 2
Observation Grid

No	Objects of observation	Indicator
1	Implementation of the education system	1.1 History of the establishment of *pesantren*
		1.2 Pesantren Conditions
		1.3 Students activities
		1.4 *Pesantren* Facilities
		1.5 *Pesantren* Programs
2	Subjects of the educational system	2.1 *Pesantren* leaders
		2.2 Boarding school administrators
		2.3 Pendidik/ustadz
		2.4 Students
3	Actualization of education	1.1 Learning methods from time to time
		1.2 Coaching
		1.3 Skills
4	Supporting factors of the education system	4.1 *Pesantren* Facilities
		4.2 Learning Facilities and Infrastructure
		4.3 Culture
		4.4 Leadership
5	Inhibiting factors of the education system	5.1 Facilities
		5.2 Learning Facilities and Infrastructure
		5.3 Public perception

Interview Guide

The interview guide included four subject areas with 10 indicators. These subject areas were: (1) Education system (2 indicators), (2) Actualization of education (2 indicators), (3) Supporting factors (3 indicators), and (4) Inhibiting factors (3 indicators).

Table 3
Interview Guide

No	Sub subject matter	Aspects that the data source reveals
1	Education system	1.1 Educational programs
		1.2 Relevant program
2	Actualization of education	2.1 Coaching
		2.2 Skills
3	Supporting factors	3.1 Facilities
		3.2 Facilities and infrastructure
		3.3 Culture
4	Inhibiting factors	4.1 Facilities
		4.2 Facilities and infrastructure
		4.3 Public perception

Data collection techniques

Data collection was conducted through semi-structured observations and interviews, supplemented by historical records of pesantren available on official websites and previous literature studies related to the transformation of pesantren education and learning. Observations spanned one semester of the 2022/2023 school year to provide insights into daily life at the pesantren, with a specific focus on the education system and learning practices. To facilitate data collection, the author utilized notebooks, cameras, and video recorders to document the teaching and learning processes conducted by students, kyai, and ustadz. Throughout the observation process, the author conducted pre-scheduled interviews with the approval of pesantren leadership. These interviews took place in a room typically used for curriculum design meetings. Each participant's interview lasted between 30 to 45 minutes and was recorded using a video recorder, with notes also taken in the author's notebook. Interview guidance tools were employed to ensure that the interviews were focused and aligned with the research objectives.

Data analysis techniques

Miles and Huberman's (1994) qualitative data analysis techniques involve four steps, commencing with the formulation of clearly defined research objectives. This study aims to explore changes in the pesantren education system and its impact on student learning. The initial phase of data analysis involves the collection of research data, which is obtained through the process of observation and interviews and documented as research records. The second step in data reduction entails summarizing, selecting key elements, and focusing on essential data aligned with the research theme. This careful data reduction process aims to present a clear and concise picture of the pesantren education and learning system. Subsequently, the third step involves presenting the data through narrative text. The presented data is categorized into three main sections corresponding to the research questions (RQ). RQ1 data encompasses data 1, data 2, and data 3. RQ2 data comprises data 4, data 5, and data 6. RQ3 data includes data 7 and data 8. The final step in the data analysis process involves drawing research conclusions based on the data reduction. These conclusions are carefully crafted to synthesize the collected data. The validity of the data is ensured through a process of data triangulation and peer review, guaranteeing consistency with the research findings. To ensure the accuracy of the collected data, source triangulation is implemented by cross-referencing information from previous theories and studies related to various education

and learning systems in pesantren. The author thoroughly examines these sources to verify the accuracy of the collected data. Subsequently, a comparison is made between the collected data and observations obtained through interviews, as well as documents associated with learning patterns, models, and historical records of pesantren. This approach strengthens the robustness and reliability of the research findings.

Result and Dicussion

Transformation of the education system at the *Pesantren* Tegalsari Ponorogo

The initial discovery related to the Tegalsari pesantren education system reveals a series of transformations it has undergone. In its early establishment, Tegalsari pesantren was classified as a Salaf Pesantren, characterized by traditional learning methods. Two primary learning approaches were employed: the sorogan method (talaqqi)-wetonan (halaqah) and the classical method. The pesantren's infrastructure reflected modernity for its time, featuring a lavish and spacious mosque constructed from bamboo and teak wood. Initially, the Islamic boarding school focused on imparting knowledge about the meaning of life and guidance on worshipping Allah.

The students at Tegalsari pesantren have rice granaries to meet their food requirements during their stay. The pesantren employs a Salafi education system, also recognized as a non-formal education system, centered on the study of the yellow book (an ancient text). The term "non-formal education system" gained prominence following the enactment of Pesantren Law Number 20 of 2003, which was reinforced by Government Regulation Number 55 of 2007. However, as time progressed into the 19th century, pesantren faced a decline, with only a handful of people remaining. One of its successors later established the Old Gontor boarding school, which eventually changed its name in 1926 and is now known as Pesantren Modern Darussalam Gontor. Notably, pesantren have adapted by integrating modern learning systems into their educational approach. Historical records indicate that pesantren have been in existence since the 17th century, making them known to the wider community and establishing themselves as one of the oldest Islamic education centers in Indonesia.

(1) "Pesantren was established in 1742 by Kyai Ageng Muhammad Besari. Notably, some of the students from this pesantren became renowned religious figures in Java, including Pakubowono II, Ranggawarsita, Pangeran Diponegoro, and H.O.S Cokroaminoto. The institution reached its peak under the leadership of Kyai Ageng Muhammad Besari, with a student population reaching 3,000 people."

During its peak, the high enrollment of students studying the Quran and Islamic religious sciences led to the establishment of huts in surrounding villages like Bantengan, Malo, and Joresan. The prerequisite for pesantren education was that students needed to reside within the pesantren environment. At the height of its glory, Tegalsari village gained independence as a fief, exempt from all obligations to pay royal taxes, under the leadership of Pakubuwono II.Data (1) illustrates that effective leadership plays a crucial role in making the pesantren education system attractive to students across the archipelago and positively impacting the community. Existing research emphasizes the significant influence of leadership on the successful implementation of the *pesantren* education system. The absence of qualified leadership can impede the formulation of appropriate policies and hinder adaptation to evolving circumstances (Prasetyo & Ilham, 2022). In practical terms, the implementation of educational programs relies on the professionalism of teachers and effective organizational management.

(2) Likewise, robust leadership is essential for the sustained implementation of long-term programs and the establishment of efficient operational mechanisms within pesantren (Muhajir, 2022). As noted by Fokkens (1877), Tegalsari pesantren went beyond taught Quran education, incorporating teachings on Buddhist secrets, Javanese beliefs, and supernatural sciences —a tradition upheld by *kyai kyai* even after the transition to Islam. Consequently, during the period of independence, this pesantren emerged as a significant hub for the development of freedom fighters encompassing both Islamic and nationalist movements.

In 2019, the Pesantren Law was enacted as Law Number 18 of 2019, officially recognizing Pesantren as a formal educational institution on par with other mainstream educational institutions. Following this development, the curriculum in contemporary pesantren has expanded beyond the traditional study of the yellow book, now incorporating additional subjects such as mathematics and natural sciences, aligning with the broader compulsory education requirements. While previous research highlighted the emphasis on life skills in pesantren activities to nurture students' abilities and competencies (Rochmat et al., 2022), this study adds new evidence by underlining the integration of meaningful theoretical learning within pesantren education.

Observations reveal that the historical teaching and learning methods in this pesantren included the sorogan-wetonan method and the classical method. The curriculum encompassed teachings on Shafi' jurisprudence, Ashariyah and Maturidiyah methodological creeds, Al-Ghazali's methodological Sufism, and various other Sufi doctrines. Additionally, students engaged in regular practices such as the recitation of tahlil, istighatsahn, and the study of manaqib (biographies) of

esteemed scholars within the congregation.The current number of students is considerably fewer than during its peak, with less than 15 students per caregiver and teacher. Some teachings handed down by Kyai Ageng Muhammad Besari, such as *Wujud-wujudan, Utawen, Munajatan, Kitab, and Salawatan* accompanied by Flying, have nearly vanished. This indicates a significant upheaval in the education system at Tegalsari Islamic boarding school over time. The once prominent Salafi education taught in the pesantren has gradually faded as the student enrollment has declined year after year. Following the adoption of the modern education system, the new pesantren shifted its focus to formal education within the school system, placing emphasis on modern Arabic, particularly speaking or muhawarah. The traditional yellow book recitation system, including sorogan, wetonan, and madrasah diniyah recitations, has gradually been abandoned. In the initial stages of its establishment, the pedagogy within pesantren followed distinctive patterns and Salafi education methods. These included the *sorogan-wetonan*, or sorogan-bandongan, method, as well as the classical method. The sorogan method (*talaqqi*) involved students reading the studied book aloud in front of the ustadz or kyai. On the other hand, the wetonan (halaqah) learning method required students to listen attentively, comprehend, and provide a translation (ma'na) of the text, along with the grammatical analysis (i'rab) of each expression. Classical methods are predominantly employed for the study of religious sciences within pesantren. In the modern Pesantren, however, student education extends beyond the traditional classroom setting. The pesantren education curriculum adopts a holistic approach, encompassing the entirety of a 24-hour day. This model, often termed 'holistic education,' engages and educates students across various aspects of their lives.

The learning method at Tegalsari pesantren continues to uphold the cultural characteristics of Salaf pesantren. The pesantren maintains the use of Jawi/Pegon/Pego script in the recitation of the yellow book, employing a system that incorporates both ma'na bald and ma'na free translation simultaneously (murad). Nevertheless, the new Islamic boarding school has adopted the Kulliyatul Mu'allimin Al-Islamiyah (KMI) curriculum. According to the interview results, KMI was established on December 19, 1936, as an Islamic teacher education institution emphasizing the development of mental attitudes and the cultivation of Islamic knowledge. "There are two programs at KMI: the regular program and the intensive program. The regular program is designed for students who have completed elementary school, with a study period of six years. On the other hand, the intensive program caters to students who have graduated from junior and senior high

schools, with a four-year study period. Inside the classrooms, there are four clusters or divisions of learning in KMI, covering Dirasah Lughawiyah (Arabic), Dirasah Islamiyah, Dirasah Kauniyah, and Dirasah Ammah."

(3) "In this pesantren, all students are required to master Arabic since it serves as the daily language of instruction. Dirasah Lughawiyah encompasses Durusul Lughah, insya', muhadatsah, mutholaah, nahwu, sharaf, mahfudzat, balaghah, Arabic literary history, and tarjamah. Dirasah Islamiyah covers the Qur'an, Tafsir, Hadith, Musthalah Al Hadith, Jurisprudence, Ushul Fiqh, Tawhid, Islamic Dates, and Adyan. Dirasah Kauniyah includes mathematics, physics, chemistry, and biology. Finally, Dirasah Ammah involves history, geography, statecraft, sociology, psychology, bookkeeping, and English."

From data (3), it is evident that the new pesantren has implemented a more diverse education system with various educational programs. Maintaining the tradition of the old pesantren, male students are encouraged to wear sarongs and peci during learning and daily activities. Outside the classroom, KMI engages in various activities, including weekly, semi-annual, annual, and co-curricular activities. These include teacher evaluations, upgrades, debriefing sessions to prepare teachers for the material to be taught, as well as supervision and evaluation of teaching and learning programs. Additionally, KMI organizes evening guidance, general tests, semester exams, Turats book studies, teaching practice exams, Hajj management practices, training to open dictionaries, writing scientific papers, general discussions, iqtishadiyah scientific rihlah, and other activities. To support the learning process, KMI has established facilities such as student libraries, reference libraries for teachers, physics, biology, computer, and language laboratories. The institution also provides offices, representative study rooms, and various teaching aids. A recent study by Kardi et al. (2023) underscores the significance of infrastructure in bolstering the modern pesantren education system, as qualified infrastructure enhances the effectiveness of the teaching and learning process. The initial findings highlight the historical significance of the Tegalsari Ponorogo Islamic boarding school, which experienced a period of glory in its early years but gradually regressed over time. Despite this regression, the *pesantren* has maintained its traditional learning system. In contrast, the new Pesantren Modern Darussalam has embraced a modern education system under new leadership, marked by proficient teachers and advanced infrastructureThis transformation underscores the impact of leadership and policies on pesantren development. As noted by Picciano et al. (2010), educational transformation involves shifting from classical to modern learning methods.

The success of *pesantren* in transforming their education systems can serve as a model for character education in other modern pesantren (Akbar et al., 2022). Studies have indicated that certain Salafi Islamic boarding schools have adopted a blend of traditional and modern learning patterns. While maintaining religious teachings and traditions, these pesantren incorporate more modern learning methods (Arifin, 2022). Tegalsari pesantren, despite its historical significance, faced challenges in sustaining its traditional education system, prompting a shift towards a new and more contemporary educational approach. This evolution reflects the dynamic nature of educational systems over time.

The education System in Jamsaren Surakarta

The second finding regarding the Jamsaren pesantren education system indicates changes in learning methods. Originally a Salafi education system, over time, it evolved into two distinct systems: the Salafi education system and Madrasah Diniyah (Madin). However, during the Dutch East Indies era, substantial changes were limited due to the war between the Dutch and Prince Diponegoro, resulting in a 50-year vacuum for the pesantren starting from 1830.Following a 50-year hiatus, Kyai Idris took charge of rebuilding the pesantren, reintroducing religious learning with a traditional emphasis on mastering the yellow book in a small surau. By 1913, the traditional sorogan learning method gave way to a class system (classical). Over the years, and up to the administration of President Jokowi, the pesantren has undergone a transformation, incorporating science and technology-based education. Pesantren Jamsaren, founded in 1750, experienced its heyday under the leadership of Kyai Idris. Despite a 50-year hiatus during the Dutch East Indies in 1830, the pesantren continued to produce prominent religious leaders who went on to establish pesantrens in their respective regions, such as Kyai Mansyur, Kyai Dimyati, and Kyai Arwani. In its early years, the Salafi learning system at Jamsaren focused on studying Islamic scriptures, with a diverse range of books being studied even today. Data source (4) provides insight into the early history of the establishment of Jamsaren Solo pesantren and the learning materials taught by Kyai. It is elucidated that the Salafi education system places emphasis on learning Arabic and Islamic books, translated into Javanese Pegon—a language adapted to the Arabic structure. The curriculum includes subjects such as Nahwu, Shorof, Tajweed, Qiroah, Tafsir, Fiqh, Hadith, Mantiq, Tarikh, and Tasawwuf. These books are organized into seven subjects, namely fiqh, hadith, qur'an, tawhid, Arabic literature, Sufism, and tafsir. Previous studies have indicated that pesantrens employing the

Salafi education system can be identified by their use of learning materials derived from Islamic books, with some later translated into Javanese (Tahmid & Darim, 2022).

In practice, each lesson is tailored to the grade level and abilities of the students. The teaching method is conducted in two ways. Firstly, the sorogan method involves students facing Kyai one by one, taking turns to explain or memorize the given lessons. Secondly, the wetonan or bandongan method entails students in groups facing Kyai, with each student carrying their own book. The pesantren observes regular practices such as commemorating the Prophet's birthday by reading books on the Nabawiyyah sirah. Data (5) highlights the utilization of two learning methods in the pesantren, similar to the learning approach at Tegalsari Islamic Boarding School, incorporating the sorogan and wetonan methods. The admission system for students is non-selective, admitting every student without discrimination. However, class placement is determined based on the students' foundational religious knowledge skills. From the information provided in data (6), it is evident that the initial implementation of the education system in pesantren was straightforward, emphasizing the teachings of the salaf through the study of yellow books. However, with the progression of time, the education system has evolved to align with contemporary developments. The learning approach currently employed concentrates on nurturing Islamic beliefs (aqidah Islamiyah) and cultivating noble character traits (akhlaq al karimah).From data (6) it is evident that the learning focus in pesantren revolves around the sciences of *aqidah Islamiyah* (Islamic creed) and *akhlaq al karimah* (noble character traits). This includes teachings on monotheism, belief, and faith in the oneness of Allah *Subhanahuwata'ala*, as well as examples from the life of Prophet Muhammad *Shallaahu Alaihi Wassalam.*

The science of *aqidah Islamiyah* aims to instill in students an understanding of distinguishing between good and bad based on the parameters of the Quran and shahih hadiths (Apriani et al., 2021). Thus, the learning of these sciences holds significant importance in supporting the character education of students.

Jamsaren Solo Islamic Boarding School continues to employ classical learning methods. However, since the reform period, there has been a shift towards enhancing students' and teachers' insights. Students, known as santri, are encouraged to read books and contribute to literacy in newspapers, utilizing reference materials available in libraries. To further develop students' skills, both within and outside the curriculum, various intracurricular and extracurricular activities are integrated. The leaders of the Islamic boarding school emphasize the importance of equipping students not only

with religious knowledge but also with broader insights and skills. This approach aims to cultivate emotional intelligence, independence, integrity, leadership qualities, and effective managerial abilities among the students. Similarly, fostering a healthy lifestyle is a long-term commitment at the *pesantren*. Students are educated on patterns of consuming halal food and beverages, adopting exercise routines, and ensuring proper rest. Recent studies indicate that the promotion of clean and healthy lifestyles is gaining popularity among Islamic boarding schools. This trend has become more pronounced, particularly in the wake of the global COVID-19 pandemic. (Susanto et al., 2016). Clean and healthy lifestyles practices are progressively integrated integrated into modern Islamic boarding schools in Indonesia.

The second finding reveals that the quality of science taught at Jamsaren Solo pesantren differs from that in mainstream schools. In public schools, the emphasis is on social and natural sciences. In contrast, pesantren focuses on religious sciences, emphasizing mastery of classical Islamic literature in both Classical Arabic and Modern Standard Arabic across various disciplines of religious science (yellow book). Additionally, the curriculum includes a deep understanding of Arabic grammar, covering nahwu, sharaf, aurdi, ma'ani, bayan, badi', and logic. This is due to the substantial presence of these sciences in the pesantren curriculum, alongside the study of Shafi'i madzhab jurisprudence. Moreover, the religious knowledge taught comes with a sanad, establishing a lineage of knowledge transmission. The emphasis on moral formation al karimah aims to shape students' behavior and conduct in social life (Muhammad, 2017). The new education system seeks to equip students not only with religious knowledge but also with interpersonal and intrapersonal intelligence, fostering qualities such as honesty, trustworthiness, discipline, and responsibility.

The Impact of Education System Changes on Student Learning at Tegalsari Ponorogo and Jamsaren Solo Islamic Boarding Schools

The third finding addresses the impact of the transformation of pesantren education on overcoming. longstanding learning gaps resulting from various historical events Events such as the Dutch East Indies war, the struggle for independence, the New Order period, and the challenges posed by the Covid-19 pandemic have impacted the education system, causing disruptions. The adoption of a modern education system by pesantren has facilitated the development of learning programs and methods that align with contemporary needs.

The modern transformation of Tegalsari Islamic Boarding School is evident in its adoption of the Kulliyatul Mu'allimin Islamiyah (KMI) curriculum. This curriculum integrates 100% religious science and 100% general science, rejecting the dichotomy between these two fields of study. The pesantren emphasizes a holistic learning approach, incorporating diagnostic assessments to gauge students' proficiency levels. This ensures that teachers tailor their instruction to the specific abilities of each student, enhancing the overall quality of learning.Likewise, Jamsaren Solo Islamic Boarding School has undergone a transformation, aligning itself with the Surakarta al-Islam College Foundation to become a formal education boarding school. This collaborative effort provides students with a unique educational experience, combining Islamic religious education with general science. Notably, the key distinction between the two pesantren lies in the evolving infrastructure that supports their respective education systems over time. The learning approach at Jamsaren pesantren prioritizes the creation of an adaptive and proactive curriculum to enhance the effectiveness and efficiency of the learning process. Students are exposed not only to Islamic religious education but also to practical life skills, encompassing areas such as automotive skills, computer proficiency, and handicraft and textile design. This reflects the pesantren's commitment to providing a comprehensive education that extends beyond traditional religious studies.

The present education system at Jamsaren pesantren places emphasis on crafting an adaptive and proactive curriculum geared towards instilling the values of the Quran. The overarching vision is to establish a pesantren that excels in science and technology while fostering an independent spirit rooted in faith and piety. Furthermore, to facilitate effective learning, the education system is reinforced by contemporary and pertinent facilities and infrastructure. The human resources and personnel involved in education demonstrate professional competence aligned with the requirements of the educational program. This reflects a commitment to providing a holistic and modern education within the pesantren framework.The newfound freedom and resources, utilized in innovative ways, have sparked a transformation in learning methods, leading to increased innovation. This shift has resulted in notable achievements among students. Historical evidence indicates that the early establishment of these pesantren played a pivotal role in nurturing numerous religious figures, freedom fighters, founders of pesantren in various regions, and influential writers who have left a lasting legacy across generations. This attests to the profound impact of the evolving education system within these pesantren.The rich history of Tegalsari pesantren has produced notable figures such as Abdul Hamid, Haji Oemar Said Tjokroaminoto,

and King Kasunanan Kartasura Pakubowono II. Similarly, Jamsaren Solo pesantren has contributed significant personalities like Munawir Sadzali, former Minister of Religious Affairs of the Republic of Indonesia, and Miftah Farid, Chairman of the West Java Indonesian Ulema Council. These individuals have played crucial roles in various fields, reflecting the impactful legacy of these pesantren in shaping the destinies of influential figures.

The modern education system at Jamsaren pesantren has yielded positive impacts on student achievements. The learning methods implemented have contributed to the development of students' characteristics, leading to notable accomplishments. Some of the achievements include securing the 1st place in calligraphy at the SMA/MA/SMK level in Solo Raya STAIN Surakarta, excelling as a POPDA Solo pencak silat athlete, achieving 1st place in MTQ pelaajra se Solo Raya, and earning the third place in the national level MAN-MAS Chemistry Olympiad. These achievements showcase the effectiveness of the contemporary education system in fostering diverse talents among students.

The data suggests that the structure of the existing curriculum program has played a pivotal role in enhancing student achievement. The transformation of the education system in both pesantren has positively influenced the learning process, contributing to the overall improvement of education quality. It is noteworthy that while modern education systems have been adopted, traditional learning methods and religious traditions persist as integral aspects of pesantren. Classical learning methods are rooted in philosophical meanings that contribute to the unique identity and essence of pesantren education. The comparison between *Pesantren* Tegalsari Ponorogo and its successor, Pesantren Darussalam, highlights the evolution of religious education from a traditional Salafi pesantren to a modern institution that embraces technology. Meanwhile, the transformation of Jamsaren Solo Islamic Boarding School underscores the shift from traditional sorogan and wetonan methods to more modern learning approaches. This transformation is crucial to ensure that graduates possess superior competence in adapting to contemporary challenges. The failure to adapt and transform education may hinder the ability to produce graduates with the skills needed for the current times (Gube & Lajoie, 2020). Indeed, the importance of transforming the education system is recognized in various studies, emphasizing changes to the learning curriculum, pedagogy, to the role of teachers and students (Etherington, 2019).

Quality management in education and learning within pesantren is seen as a means to compete effectively with formal education in public schools. Successful pesantren are expected to produce graduates with superior competence, noble character, and ethical virtues (Muliawan et al., 2022). Conversely, a weak education system in pesantren may result in graduates lacking competence in their respective fields. The current pesantren education system and curriculum are very different from the beginning of its establishment (Purwanto et al., 2021; Miar et al., 2024; Nuryanto et al., 2019; Purwaningsih et al., 2024; Yusuf et al., 2024) In contrast to prior literature focusing on the competitiveness of pesantren, this study offers insights into the imperative for change within pesantren. It delves into the reasons necessitating this transformation, delineates the envisioned alterations in pesantren structures, and elucidates the processes through which pesantren institute these changes. The research findings not only address these inquiries but also contribute novel perspectives on the repercussions of evolving the current education system.

The implications highlight the importance of collaboration and support from various stakeholders, including the government, religious authorities, and pesantren leaders, in promoting the transformation of pesantren education systems. Emphasizing the need for a holistic approach that goes beyond just improving graduates' skills, the study suggests a focus on instilling values, adapting to contemporary challenges, and nurturing individuals who excel in both morality and knowledge, including science and technology.

Conclusion

It's clear that the Tegalsari Ponorogo pesantren underwent transformation not only in terms of its human resources but also in the establishment of the Modern Darussalam pesantren. On the other hand, the Jamsaren Solo pesantren evolved from classical education methods to a modern formal education system. The third part is the key conclusion that the transformation of Pesantren education has led to a shift from traditional learning to a more student-centric approach. It's acknowledged that there are limitations related to the number of research subjects and the research design. Future studies can explore additional factors influencing the transformation of education in pesantren using more advanced methods.

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