

Transformation of Boarding School Management Models in Enhancing Student Accessibility and Educational Quality

Agus Darwanto¹, Rully Charitas Indra Prahmana[✉], Ani Susanti¹, Ibrahim Alhussain Khalil²

¹Universitas Ahmad Dahlan, Yogyakarta, Indonesia

²University of Bisha, Bisha, Saudi Arabia

ABSTRACT

Purpose – Boarding schools in Indonesia integrate Islamic religious education with general education, offering a comprehensive learning and living experience for students. This model is effective in character building, moral value reinforcement, tolerance promotion, social integrity, and responsibility, all while emphasizing knowledge and technology mastery. However, these schools face challenges, including high costs, geographical barriers, and stringent academic requirements that limit accessibility for some students. This research underscores the need for management transformation in boarding schools to enhance accessibility and education quality while preserving the unique values and identity of *pesantren*.

Design/methods/approach – Utilizing a literature review methodology, this study critically summarizes and evaluates relevant research to provide a comprehensive understanding of the transformation of boarding school management in Indonesia.

Findings – The findings indicate that boarding schools must adapt to socio-cultural contexts and incorporate information and communication technology into management and learning processes. The study also reveals that parental involvement, effective management, and support for students' mental and physical health are crucial for the success of boarding schools.

Research implications/limitations – Future research should focus on integrating ICT to improve educational outcomes and administrative efficiency, assessing holistic education models, evaluating economic empowerment programs, and examining mental health initiatives, as well as exploring collaborative efforts to enhance community engagement and support for students.

Originality/value – Strengthening *pesantren* culture can address issues such as bullying, poor nutrition, and financial difficulties. Transformational management practices can meet the evolving educational needs and dynamic desires of parents and students while maintaining the core values of *pesantren* in Indonesia.

 OPEN ACCESS

ARTICLE HISTORY

Received: 24-05-2024

Revised: 20-06-2024

Accepted: 30-06-2024

KEYWORDS

Accessibility;
Boarding School;
Management;
Quality

CONTACT: ✉ rully.indra@mpmat.uad.ac.id

© 2024 The Author(s). Published by Islamic Education Department, State Islamic University Sunan Kalijaga Yogyakarta, ID
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Introduction

Boarding schools in Indonesia offer a unique educational model that integrates learning with living experiences for students (Suwarno & Chasanah, 2021). These institutions merge Islamic religious education with general education, creating an environment where students engage in both academic and residential activities (Saefudin, 2021). This dual approach not only facilitates academic learning but also promotes personal development within a structured community setting. Furthermore, Tabroni et al. (2022) highlight that Islamic religious education in these schools is highly effective in developing students' character, upholding moral values, fostering tolerance, promoting social integrity, and instilling responsibility, all while emphasizing the mastery of knowledge and technology. This comprehensive approach is considered one of the strengths of Islamic boarding schools, providing a robust foundation for academic achievement and preparing students for professional futures (Rumainur et al., 2022). Therefore, Indonesian boarding schools integrate Islamic religious education with general education, fostering academic learning and personal development within a structured community, effectively developing students' character, moral values, tolerance, social integrity, responsibility, and technological proficiency.

Despite its numerous advantages, the boarding school model in Indonesia faces significant challenges. One of the primary obstacles is the high cost of attending these schools, which can be prohibitive for many families (Jeptanui et al., 2022). Additionally, geographical barriers pose another challenge, as many students in remote areas find it difficult to access boarding schools (Redman-MacLaren et al., 2019). Furthermore, stringent academic requirements can limit the accessibility of these institutions to a broader student population (Shi, 2020). These challenges necessitate ongoing adaptations and reforms to ensure that the boarding school model remains viable and accessible to a diverse range of students.

To address these issues, boarding schools in Indonesia must undergo transformative changes that enhance both accessibility and educational quality. This requires a multifaceted approach that includes reducing financial barriers, improving infrastructure in remote areas, and re-evaluating academic entry requirements to be more inclusive (Darojat, 2023). Moreover, it is essential to maintain the unique values and identity of Indonesian boarding schools, particularly the emphasis on Islamic education and character building. By doing so, these institutions can continue to provide a holistic educational experience that prepares students for the complexities of modern life while preserving their cultural and religious heritage.

An essential aspect of this transformation is the integration of information and communication technology (ICT) into the management and learning processes of boarding schools. Incorporating ICT can facilitate remote learning, enhance educational resources, and streamline administrative tasks, making the schools more efficient and accessible. Collaboration with various stakeholders, including government agencies, private sector partners, and local communities, is also crucial in supporting these initiatives. Through such

collaborative efforts, boarding schools can leverage additional resources and expertise to improve their infrastructure and educational offerings.

Finally, while boarding schools in Indonesia offer a valuable educational model that combines academic and religious education within a residential setting, they face significant challenges that need to be addressed to improve accessibility and quality. Transformative efforts, including financial, infrastructural, and academic reforms, are necessary to ensure these schools remain inclusive and effective. By integrating ICT and fostering collaboration with various stakeholders, boarding schools can enhance their educational impact while preserving their unique cultural and religious values. This comprehensive approach will help sustain the relevance and success of the boarding school model in Indonesia, ultimately benefiting a broader range of students and their communities.

Methods

Effective management of boarding schools is essential for ensuring that students receive a high-quality education and comprehensive care (Iskandar et al., 2022). The management models employed by these institutions must be periodically evaluated to ascertain their effectiveness and alignment with desired educational goals. Utilizing data-driven and evidence-based evaluations can significantly contribute to the transformation and enhancement of boarding school management practices.

Research methodologies play a pivotal role in studying and evaluating the effectiveness of boarding school management models. Both quantitative and qualitative methods can be employed to gain a comprehensive understanding of the management dynamics and their impact on student outcomes (Cohen et al., 2017). Among these methodologies, literature reviews are particularly valuable. Literature reviews involve the systematic summarization, synthesis, and critical evaluation of existing research on a specific topic, offering a thorough understanding of the current state of knowledge and highlighting areas that require further investigation.

Several types of literature reviews can be utilized to evaluate boarding school management models, each serving different purposes. Narrative reviews provide a broad overview of the topic, synthesizing findings from various studies to present a coherent narrative. Systematic reviews, on the other hand, follow a rigorous and structured approach to identify, evaluate, and synthesize all relevant studies on a particular topic, ensuring a comprehensive and unbiased overview. Meta-analyses combine statistical data from multiple studies to draw more precise conclusions about the effectiveness of specific management practices. Scoping reviews map the existing literature, identifying key concepts, gaps, and types of evidence available, thereby providing a foundation for future research.

The primary objective of conducting a literature review in the context of boarding school management is to compile and critically assess the existing body of knowledge. This process not only offers insights into current management practices but also identifies gaps and inconsistencies in the research. By addressing these gaps, researchers and educators

can develop more effective management strategies that enhance the quality of education and care provided in boarding schools.

The effective management of boarding schools is crucial for delivering high-quality education and ensuring the well-being of students. Regular evaluations of management models, supported by data-driven and evidence-based approaches, are essential for continuous improvement. Utilizing appropriate research methodologies, particularly literature reviews, can provide valuable insights into the effectiveness of existing management practices and guide the development of more effective strategies. Through comprehensive evaluations and evidence-based transformations, boarding schools can better meet the evolving educational needs of their students while maintaining high standards of care and academic excellence.

Result and Discussion

Every parent desires their children to achieve good academic performance. Boarding schools are a popular choice for parents who aspire for their children to excel in morals, behavior, and academic achievements (Erichsen & Waldow, 2020). According to Baker and Andrews (2019), numerous factors influence parents' decisions when choosing a boarding school for their children.

Vigar-Ellis (2013) identified several criteria that parents in South Africa consider when selecting a boarding school for their sons. These criteria include the quality of education, discipline values, facilities and resources, reputation and credibility, and affordable costs. Using surveys and in-depth interviews, this research gathered data from 200 parents, providing valuable insights into parents' expectations. These insights can inform the development of management practices that better meet students' needs.

The role and identity of *pesantren*, or Islamic boarding schools, in the new normal era require strategic management practices that resonate with socio-cultural contexts (Hanafi et al., 2021). In response to contemporary challenges, *pesantren* are increasingly integrating information and communication technology (ICT) into their educational frameworks, incorporating smart learning tools and smart infrastructure. This approach not only enhances educational outcomes but also serves as a vehicle for promoting Islamic values and preserving the rich cultural heritage of *pesantren* (Akromusyuhada et al., 2023). Moreover, collaboration among stakeholders is crucial for improving educational quality and services. For instance, Wahab et al. (2021) documented the collaboration between MAN 2 Yogyakarta and Pondok Pesantren Ainul Yakin, focusing on fostering independence and character development among special needs students. Such initiatives underscore the adaptive strategies of *pesantren* in addressing diverse educational needs within their communities.

Furthermore, partnerships between *pesantren* and educational institutions both locally and globally play a pivotal role in enriching educational experiences. Rahman et al. (2023) explored the collaboration between Institut Agama Islam Negeri (IAIN) Lhokseumawe and Dayah Terpadu Al-Muslimun, aimed at enhancing students' English proficiency to facilitate opportunities for higher education abroad. This exchange not only

broadens students' horizons but also strengthens the academic rigor of *pesantren* education. Additionally, establishing partnerships with national and international entities enables *pesantren* to engage in student exchanges, participate in competitions, and enhance educational systems and curricula through shared resources, funding, training, and capacity-building initiatives (Muslim, 2022). Such collaborative efforts empower *pesantren* to navigate global educational landscapes while preserving their foundational ethos and cultural identity.

Research by Chang et al. (2023) highlights the profound impact of boarding schools on cognitive and non-cognitive development among adolescents in China. Through longitudinal analysis involving 1,500 teenagers across boarding and public schools, the study reveals significant advantages for boarding school students. They consistently outperformed their counterparts in cognitive ability tests, exhibited higher levels of self-confidence, learning motivation, interpersonal skills, and adaptability. These findings underscore the holistic benefits of boarding school environments in nurturing well-rounded individuals capable of thriving academically and socially.

Islamic boarding schools, such as *pesantren*, play a pivotal role in shaping youth with robust moral character to fulfill national objectives (Mardi et al., 2023). According to Supriyanto and Amrin (2022), these institutions prioritize the development of cognitive, affective, and psychomotor skills as fundamental educational goals. Istiqomah and Setiawan (2021) emphasize that integrating religious studies, soft skills training, and extracurricular activities effectively enhances both academic and non-academic abilities among students. The nurturing environment of *pesantren*, characterized by its tranquility, comfort, and safety, supports not only cognitive and psychological development but also strengthens character traits such as diligence in worship, polite behavior, gentle speech, and independence (Maemunah & Wahyudi, 2022). Training in independence positively correlates with the development of emotional intelligence among students (Pratiwi et al., 2020). Therefore, effective management of boarding schools entails understanding parental expectations, continually improving educational quality, fostering discipline values, enhancing reputation and credibility, and engaging in ongoing reflection and evaluation processes.

Yang et al. (2023) investigated the snacking habits and nutritional intake of boarding school students in Indonesia, focusing on 238 students from both *pesantren* and general boarding school systems. Their study revealed that boarding school students generally consumed higher calories and fats, but lower fiber and vitamins compared to recommended nutritional guidelines. The frequent consumption of unhealthy snacks such as fried foods, sweets, and sodas contributed to this imbalance. Therefore, Chen et al. (2018) recommended that boarding school management prioritize ensuring students' overall nutritional intake is balanced. These findings underscore the importance of implementing measures such as providing healthier food options, enhancing nutrition education programs, and enforcing stricter regulations on food and beverage choices within boarding school environments.

Ensuring control over eating patterns and menu management in boarding schools is paramount, as evidenced by Akram's (2020) report on a food poisoning outbreak at a boarding school in Pakistan. This incident affected 120 students who became ill after consuming food from the school's canteen. Such occurrences underscore the critical need to enhance food safety management within boarding school facilities. Appietu and Amuquandoh (2020) stress the significance of food hygiene training and rigorous supervision to uphold the safety and hygiene standards of meals served in boarding schools. Adequate training for staff responsible for student nutrition is essential to enforce safe food handling practices and mitigate the risk of future incidents.

Effective management of eating environments in boarding schools involves implementing robust protocols to monitor and regulate food preparation, storage, and serving practices. Akram's case study serves as a cautionary tale, highlighting the repercussions of lapses in food safety. Appietu and Amuquandoh's (2020) recommendations underscore the proactive measures needed, including continuous training programs that equip staff with the knowledge and skills to maintain high standards of food hygiene. By adhering to these practices, boarding schools can create a safe and healthy dining environment conducive to the well-being of students, thereby preventing foodborne illnesses and promoting overall health within educational settings.

Some *pesantren* still employ physical punishment as a disciplinary measure for students who violate rules. Gofar (2020) argues that such punishments are intended to instill discipline and produce disciplined graduates. However, the use of physical punishment raises concerns about its potential to escalate into physical violence against students (Ramadhaniah et al., 2023). This practice sometimes conflicts with international human rights standards, prompting Rahmatullah and Baharun (2023) to advocate for a balanced dialogue involving scholars, educators, and human rights activists. They emphasize the importance of finding alternative disciplinary methods that do not compromise students' physical integrity or psychological well-being.

In addressing broader challenges, boarding school management plays a crucial role in safeguarding students from radicalism, violence, and fundamentalism. Subhani et al. (2018) highlights the significance of integrating a comprehensive curriculum, religious education, and diverse extracurricular activities. These initiatives not only promote holistic development but also create a supportive environment that fosters critical thinking and tolerance among students. By implementing these measures, boarding schools can effectively nurture a safe and inclusive educational atmosphere that respects both academic excellence and human rights principles.

Bullying is a recurring issue within *pesantren*, as highlighted by Retnowuni and Yani (2022), who identified revenge, imitation, and seniority as key drivers of bullying behaviors aimed at weakening victims' mental resilience, asserting power, and deriving satisfaction. To address this issue, *pesantren* should actively engage in anti-bullying initiatives. Retnowuni and Yani (2022) advocate for campaigns that raise awareness and prevent bullying through continuous observation, seminars, and counseling sessions (Sihidi & Amirudin, 2022). Moreover, effective management strategies are crucial in developing

conflict resolution skills that can mitigate bullying behaviors and support students' psychological well-being (Ananda et al., 2023). These efforts are integral to fostering a positive *pesantren* culture that promotes self-control and reduces aggressive behaviors among students, as emphasized by Wakhid et al. (2020).

Communication patterns within boarding schools were examined by Hastasari et al. (2022), who conducted a study involving 100 male and female students across various grade levels at Pesantren Muallimin Muhammadiyah. The research revealed that communication in boarding schools primarily revolves around religious studies, discussions, and participation in extracurricular activities. These avenues facilitate learning, information exchange, and the cultivation of positive relationships among students. However, the study also observed that communication dynamics between students tend to be more open and frequent compared to interactions between students and teachers. These findings underscore the ongoing need to enhance communication strategies within boarding school environments.

Effective communication strategies are pivotal in fostering a supportive and engaging atmosphere within boarding schools. Hastasari et al. (2022) suggest that optimizing communication channels can contribute significantly to students' educational experience and social development. Enhancing communication between students and teachers can promote a more collaborative learning environment and strengthen teacher-student relationships. Moreover, fostering open dialogue through structured activities and discussions can help address any existing communication gaps and improve overall interaction dynamics within the boarding school community. By continually refining communication strategies, boarding schools can create a conducive environment that nurtures both academic achievement and positive social interactions among students.

McCalman et al. (2020) investigated the role of boarding schools in promoting students' mental health and well-being, conducting a study involving 207 boarding school staff, 102 parents, and 35 students from various Australian boarding schools. The findings underscored the necessity for boarding schools to offer robust mental health services and create a safe, supportive environment for students. Effective communication between staff, parents, and students is crucial in this regard, fostering an open and encouraging atmosphere that supports students' mental health needs.

To enhance students' mental health, boarding school staff must engage in proactive communication strategies with parents and students. McCalman et al. (2020) emphasize the importance of open dialogue and supportive interactions as essential components of effective mental health support within boarding school settings. These findings highlight the need for boarding schools to adopt proactive measures aimed at promoting the overall well-being of their students. By prioritizing mental health services and fostering a communicative environment that encourages student and parent engagement, boarding schools can effectively support students in navigating the challenges of adolescence and academic life.

Research by Sauri et al. (2022) underscores the significant impact of mental and physical health on students' learning achievement, behavior, and overall well-being.

Addressing these aspects is crucial in educational settings, including *pesantren*, where effective health management can enhance student outcomes. Web-based information technology, as suggested by Handayani et al. (2022), plays a pivotal role in improving health management practices within *pesantren*. By leveraging technology, *pesantren* can mitigate the risk of disease outbreaks and promote a healthier environment conducive to learning.

In addition to health management strategies, activities such as sports play a vital role in enhancing students' mental and physical health. Bondar et al. (2023) argue that participation in sports not only improves cognitive abilities but also reduces symptoms of depression among students. These activities contribute significantly to creating a positive and supportive learning environment within *pesantren* and other educational institutions. By integrating sports and similar initiatives, *pesantren* can foster holistic development among students, promoting both physical fitness and mental well-being essential for academic success.

The geographical distance between students' homes and school locations has been shown to significantly influence academic performance, as highlighted by Vieira et al. (2018). Longer distances can decrease students' accessibility to schools, resulting in increased travel time and higher transportation costs, as found by Sumari et al. (2019). This disparity aligns with the observations of White & Lee (2020), who noted that students residing closer to schools generally have better enrollment opportunities compared to those living farther away. Despite the challenges posed by geographical distance, boarding schools provide a viable solution by offering accommodation near educational facilities. However, the impact of distance on academic outcomes persists, albeit with potential for mitigation through adaptive measures.

Understanding the implications of geographical distance on educational access underscores the need for adaptive strategies within educational systems. Sumari et al. (2019) argue that reducing travel time and transportation costs can enhance students' access to schools, thereby positively influencing their academic performance. White & Lee (2020) further suggest that policies focusing on improving proximity to schools can alleviate some of the disparities caused by distance. By recognizing these challenges and implementing adaptive measures, such as providing transportation support or facilitating access to boarding facilities, educational institutions can mitigate the negative impact of geographical distance on students' educational opportunities and outcomes.

The physical distance between parents and children in boarding schools can significantly impact their emotional relationship, as evidenced by Qin et al. (2024) in a study involving 250 parents and children from various boarding schools in China. Their research indicates that both physical and emotional distances can negatively affect the parent-child bond. However, Qin et al. suggest that quality communication and robust social support mechanisms can mitigate these negative effects. Leveraging communication technologies, such as video calls and messaging apps, facilitates regular and meaningful interactions between parents and children despite the physical separation imposed by boarding school settings.

Al-Obaydi et al. (2022) further support the role of communication technology in enhancing the emotional well-being and academic performance of students in boarding schools. Their findings reveal that maintaining regular communication between parents and students reduces anxiety levels and contributes positively to academic outcomes. Recognizing these benefits, boarding school management plays a pivotal role in facilitating and encouraging frequent communication channels between students and their families. By providing access to communication technologies and promoting structured communication routines, such as scheduled phone calls and video conferences, boarding schools can strengthen the emotional bond between parents and children while supporting students' overall well-being and academic success.

Single-sex education, such as boarding schools exclusively for boys or girls, has been shown to significantly impact students' well-being and academic achievements, as highlighted by Nawas et al. (2024) in their study involving 200 students from single-sex *pesantren* in Indonesia. Research suggests that single-sex environments can foster a sense of identity and confidence among students, enabling them to concentrate more effectively on their studies and academic goals. Nuraeni (2020) supports these findings, noting that single-sex education enhances students' motivation and active participation in learning, which in turn contributes to improved academic performance. Thelma (2023) further underscores the academic benefits of single-sex education, demonstrating that students in such settings tend to achieve higher academic outcomes compared to their peers in coeducational schools.

Moreover, the preference for single-sex schools among parents often stems from concerns related to discipline and educational outcomes. Research indicates that the structured environments of single-sex schools can provide clearer boundaries and foster a more focused learning environment conducive to academic success. This preference reflects a broader societal belief in the potential benefits of single-sex education in promoting discipline and enhancing educational outcomes for students. By providing specialized educational environments tailored to the specific needs and learning styles of boys or girls, single-sex schools aim to optimize students' educational experiences and prepare them effectively for future academic and personal challenges.

The economic constraints faced by many parents pose a significant barrier to their children attending Islamic boarding schools. In response, boarding school management plays a crucial role in alleviating this burden by ensuring operational self-sufficiency. Hamid (2023) discusses the implementation of a sharia-based *santripreneur* economic empowerment program at Pondok Pesantren Darul Hikmah. This initiative aims to enhance student independence, bolster mental resilience, and introduce economic activities that benefit both students and the school community. Such programs not only alleviate financial pressures on parents but also foster a culture of entrepreneurship and self-reliance among students.

Hannan (2019) highlights similar *santripreneurship* initiatives at *pesantren* Miftahul Ulum, focusing on local wisdom such as batik crafts. These endeavors have significantly contributed to economic development and sustainability in Madura, East Java, Indonesia.

Shohib & Narsim (2023) advocate for the expansion of santripreneur programs within boarding school management strategies. They argue that these programs not only transform education by promoting creativity and entrepreneurial skills but also prepare students to navigate the challenges posed by the industrial revolution 4.0 and society 5.0. By integrating santripreneurship into their frameworks, boarding schools can empower students with practical skills and innovative thinking, equipping them for future success in an evolving global landscape.

The evolution of management practices within boarding schools is essential to align educational delivery with contemporary advancements. Mallillin and Caranguian (2023) highlight that effective management contributes significantly to academic transformation by focusing on leadership, equity, motivation, student experiences, school culture, and fostering innovative skills among students. These elements collectively ensure that boarding schools remain adaptive and responsive to evolving educational needs.

In the context of *pesantren*, Zuhri et al. (2021) emphasizes the pivotal role of transformational leadership in driving educational advancements. They argue that transformational leadership supports the development of infrastructure, upholds cultural and religious values, and enhances character education among students. This approach is crucial in preparing students to navigate the challenges posed by the Fourth Industrial Revolution. By fostering a supportive environment and promoting innovative educational practices, transformational leadership in *pesantren* can empower students with the skills and resilience needed to succeed in a rapidly changing global landscape.

The primary objective of transforming boarding school management is to enhance educational accessibility, ensuring that more students from diverse backgrounds can benefit from a high-quality education. This transformation involves several strategies, such as providing financial assistance, improving transportation facilities, and offering opportunities tailored to students with varying academic abilities. By implementing these initiatives, boarding schools aim to remove barriers to education and broaden access for a more inclusive student population. Ultimately, these efforts contribute to fostering a supportive and equitable learning environment where all students can thrive academically and personally.

Effective management stands as a pivotal factor in enhancing the quality of boarding schools, encompassing the optimization of human resources, financial oversight, and facility development. Central to this approach is the continual enhancement of teachers' and staff members' competencies through ongoing training programs. Such initiatives not only bolster instructional quality but also cultivate a dynamic learning environment responsive to educational advancements. Transparent and efficient financial management practices further underpin effective school governance, ensuring resources are allocated judiciously to support educational goals and operational sustainability. Moreover, the strategic development of facilities tailored to the teaching and learning needs fosters an environment conducive to academic excellence and student well-being.

In addition to resource management, effective boarding school management plays a crucial role in cultivating an ideal environment for student growth and learning. By

promoting a supportive and inclusive school culture, management instills values of collaboration, responsibility, and respect among students. This environment not only enhances academic performance but also nurtures holistic development, preparing students to navigate challenges beyond the classroom. Furthermore, proactive management strategies prioritize the alignment of institutional goals with evolving educational standards and community expectations. This forward-thinking approach ensures that boarding schools remain adaptable and resilient in addressing the diverse needs of their student population.

Ultimately, the implementation of effective management practices in boarding schools serves as a cornerstone for continuous improvement and innovation in education. By integrating robust human resource development, sound financial stewardship, and strategic facility planning, schools can elevate their educational offerings and student outcomes. This holistic approach not only enhances the overall quality of education but also reinforces the boarding school's role as a transformative force in preparing students for future success in a globalized society.

Innovative curriculum design, interactive teaching methodologies, and robust assessment frameworks are pivotal in elevating educational standards within boarding schools. These elements collectively enhance the learning experience by integrating cutting-edge pedagogical approaches. For instance, Kali & Das (2021) advocate for the integration of e-learning platforms and smart classrooms as transformative technologies that promote interactive learning environments. These technological tools not only facilitate personalized learning experiences but also cultivate critical thinking and digital literacy skills essential for navigating contemporary educational landscapes.

Furthermore, the implementation of diverse and enriching extracurricular programs plays a crucial role in fostering holistic student development. Beyond traditional academics, these programs provide opportunities for students to explore and cultivate their interests and talents. By engaging in activities such as arts, sports, community service, and leadership initiatives, students acquire valuable skills in teamwork, creativity, and social responsibility. This comprehensive approach to education not only enhances students' overall well-being but also prepares them to thrive in diverse personal and professional settings.

Moreover, comprehensive assessments serve as a cornerstone of effective educational strategies within boarding schools. By employing varied assessment methods, educators can accurately gauge students' understanding and progress across different subject areas. This approach ensures that learning outcomes are aligned with educational objectives while providing valuable feedback to guide instructional practices and student support initiatives. Incorporating continuous assessment strategies fosters a culture of continuous improvement, where both students and educators actively contribute to the enhancement of academic standards and educational outcomes.

The transformation of boarding school management must prioritize student welfare as a central component. Critical measures include safeguarding both physical and mental health, ensuring access to nutritious meals, and cultivating a secure and supportive

environment conducive to learning. Additionally, fostering students' independence is paramount. Programs like "*santripreneur*" are instrumental in equipping students with entrepreneurial skills and self-management capabilities. These initiatives not only prepare students to navigate future challenges but also cultivate resilience and autonomy, essential traits for their personal and professional development.

Furthermore, addressing student welfare in boarding schools involves comprehensive strategies aimed at promoting holistic well-being. By integrating initiatives that prioritize health, nutrition, and a nurturing environment, schools can foster an optimal learning atmosphere. Empowering students through programs like "*santripreneur*" enhances their capacity to thrive independently while contributing positively to their communities. These efforts underscore the importance of proactive management approaches in nurturing well-rounded individuals capable of adapting to and succeeding in an increasingly complex global landscape.

The transformation of boarding school management must prioritize student welfare as a fundamental aspect. Essential actions include safeguarding both physical and mental health, ensuring access to nutritious meals, and cultivating a safe and supportive environment conducive to learning. Additionally, boarding schools should focus on enhancing students' capacity for independent living. Programs like "*santripreneur*" play a crucial role in imparting entrepreneurial skills and fostering self-management abilities among students. These skills are vital for equipping students to tackle future challenges with independence and resilience.

Addressing student welfare comprehensively in boarding schools involves implementing strategies that promote holistic well-being. By integrating initiatives that prioritize health, nutrition, and a nurturing environment, schools can create an optimal learning atmosphere. Empowering students through programs like "*santripreneur*" not only enhances their ability to thrive independently but also prepares them to contribute positively to their communities. These efforts underscore the importance of proactive management approaches in nurturing well-rounded individuals capable of adapting to and excelling in a complex global environment.

The integration of technology in schools not only enhances education but also prepares students for an increasingly digital world. Boarding schools should incorporate cutting-edge technology into both the learning process and school management. This includes establishing robust IT infrastructure, utilizing educational applications, and implementing effective learning management systems (LMS). By embracing these innovations, boarding schools can create a more dynamic learning environment that adapts to and leverages technological advancements effectively.

Integrating the latest technology fosters a learning environment where students can develop essential digital skills and competencies. Educational applications and LMS platforms facilitate personalized learning experiences, allowing students to engage with curriculum materials in interactive and innovative ways. Moreover, robust IT infrastructure supports efficient school management operations, streamlining administrative tasks and enhancing communication between stakeholders. By harnessing technology, boarding

schools not only enhance educational outcomes but also empower students to thrive in a digitally driven society, equipping them with the tools and knowledge needed for future success.

The quality of education, effective management, and student achievements play pivotal roles in shaping a school's reputation and credibility. Academic excellence, coupled with non-academic achievements and collaborations with other educational institutions, are essential factors in enhancing this reputation. Additionally, effective promotional strategies further bolster a school's standing within the community and beyond. A boarding school with a robust reputation becomes the preferred choice for parents seeking the highest standard of education for their children.

Achieving a strong reputation requires a multifaceted approach that encompasses both academic and non-academic realms. Schools that excel academically and cultivate well-rounded student achievements naturally attract recognition and respect. Collaborative efforts with other institutions enhance educational offerings and expand opportunities for students. Moreover, strategic promotion effectively communicates the school's strengths and achievements to prospective families, reinforcing its reputation as a center of excellence in education. Ultimately, a strong reputation not only attracts students but also establishes trust and confidence among parents, affirming the school's commitment to providing exceptional educational experiences.

Through this transformation, boarding schools in Indonesia can consistently meet the expectations of parents and students while preserving their unique identity and values. Successful management transformation will ensure that boarding schools not only adapt to contemporary demands but also lead in educational innovation and character development for students.

By embracing change and implementing effective management practices, boarding schools can uphold their traditions while integrating modern educational approaches. This approach not only enhances educational outcomes but also strengthens the school's reputation as a pioneer in holistic student development. Ultimately, this transformation positions boarding schools to excel in preparing students for future challenges, equipping them with the skills and values necessary to succeed in a dynamic global landscape.

Conclusion

Boarding schools in Indonesia have successfully integrated general and Islamic education, significantly influencing students' moral development, character, and social integrity. Despite these achievements, accessibility remains a challenge due to high costs, geographical limitations, and strict academic standards. Effective management is crucial to prioritize quality education and student welfare. To address these challenges, proactive management strategies are necessary to foster collaboration with stakeholders and integrate technological advancements into educational practices. By enhancing collaboration and leveraging technology, boarding schools can enhance educational offerings and student services. Management reforms are essential to effectively tackle

these issues while upholding the core values that define Indonesian boarding school education.

Implementing changes in management practices will not only improve accessibility and educational quality but also ensure that boarding schools remain adaptable to evolving educational needs. By aligning management efforts with inclusivity and excellence goals, boarding schools can continue to provide holistic education integrating religious teachings with modern academic standards. Integration of information and communication technology (ICT) into educational management is critical for enhancing learning outcomes and service delivery. Collaboration with governments, educational institutions, and local communities is essential for achieving these goals effectively. Prioritizing mental health initiatives and promoting balanced nutrition among students are vital for their physical and cognitive development.

Creating a safe and supportive environment is crucial, requiring robust anti-bullying programs and effective conflict management strategies. These measures not only foster a secure atmosphere but also support students' psychological growth and social skills. Introducing initiatives such as *santripreneur* or Shariah economic empowerment can further enrich students' educational experiences by fostering entrepreneurial skills and alleviating financial burdens on families. Continuous evaluation and reflection on management models are vital to ensure that boarding schools remain adaptable to evolving educational needs, allowing them to maintain their commitment to providing high-quality education and holistic development for all students.

Boarding schools in Indonesia face significant challenges that impede their ability to offer accessible and inclusive education. Financial constraints are particularly formidable, limiting enrollment among lower socioeconomic families due to the high costs associated with boarding school education. Despite initiatives aimed at integrating technology and improving management practices, these financial barriers persist, restricting broader access to quality education. Geographical hurdles exacerbate these issues, especially in remote areas where boarding schools are scarce and educational resources are lacking, complicating efforts to implement consistent reforms aimed at enhancing educational standards and student welfare nationwide. Additionally, Indonesia's rich cultural and religious diversity presents complexities in ensuring that educational approaches are inclusive and respectful of diverse cultural and religious beliefs.

Future research could prioritize several critical areas to enhance the effectiveness and inclusivity of boarding school education in Indonesia. Research focusing on the integration of information and communication technology (ICT) in boarding school settings could provide insights into enhancing learning outcomes, student engagement, and administrative efficiency. Investigating the long-term impacts of holistic education models that merge religious teachings with contemporary academic standards would offer valuable insights into post-boarding school alumni outcomes and societal contributions. Furthermore, rigorous evaluations of initiatives like *santripreneur* or Shariah economic empowerment programs could shed light on their effectiveness in fostering

entrepreneurial skills and reducing financial barriers for students and their families. Studies assessing the effectiveness of mental health initiatives implemented in boarding schools could examine their effects on student well-being, academic performance, and social integration, identifying best practices across diverse school contexts. Lastly, research into collaborative efforts between boarding schools, governments, educational institutions, and local communities could uncover effective partnership models, barriers to collaboration, and strategies to enhance community engagement in educational initiatives, ultimately cultivating a more inclusive and supportive environment for all boarding school students in Indonesia.

Declarations

Author contribution statement

All authors listed have significantly contributed to the development and the writing of this article.

Funding statement

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data availability statement

No data was used for the research described in the article.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

References

- Akram, K. (2020). Outbreak investigation of foodborne illness in a religious boarding school-Islamabad 2018. *International Journal of Infectious Diseases*, 101(S1), 149. <https://doi.org/10.1016/j.ijid.2020.09.405>
- Akromusyuhada, A., Fachrudin, A., Andriyani, A., Masyitoh, M., & Bahri, S. (2023). Integration of information and communication technology in Islamic Education Management Overview of smart learning and smart building study at Islamic Digital Boarding College (IDBC) Sukoharjo. *International Journal of Integrative Sciences*, 2(10), 1515–1536. <https://doi.org/10.55927/ijis.v2i10.6295>
- Al-Obaydi, L. H., Jawad, Z. A. & Rahman, F. (2022). Class-home connection using communication technology and its impact on anxiety reduction and academic performance. *Al-Adab Journal*, 141(141), 53–66. <https://doi.org/10.31973/aj.v1i141.3615>
- Ananda, D., Nur, L, Rifa'i, S., & Fitriana, A. Q. Z. (2023). Implementasi manajemen konflik terhadap perilaku bullying di Pondok Pesantren Al-Fattah, Jember. *Jurnal Ekonomika Dan Bisnis (JEBS)*, 3(2), 272–277. <https://doi.org/10.47233/jeps.v3i2.807>
- Appietu, M. E. & Amuquandoh, E. F. (2020). Examining food safety knowledge and the microbiological quality of school meals in Ghana. *African Journal of Hospitality and Tourism Management*, 2(1), 1–15. <https://doi.org/10.47963/ajthm.v2i1.143>
- Baker, R. & Andrews, J. (2019). Parental reasons for sending children to a rural day and boarding school. *Australian and International Journal of Rural Education*, 1(1), 21–25. <https://doi.org/10.47381/aijre.v1i1.243>
- Bondar, A., Pidluzhniak, A., Dus, S., & Kulyk, D. (2023). Modern approaches to determining the impact of physical activity on the psychological health of students in wartime. *Scientific Journal of National Pedagogical Dragomanov University. Series 15. Scientific and pedagogical problems of physical culture (physical culture and sports)*, 7(167), 34–36. [https://doi.org/10.31392/NPU-nc.series15.2023.7\(167\).06](https://doi.org/10.31392/NPU-nc.series15.2023.7(167).06)
- Chang, F. Huo, Y., Zhang, S., Zeng, H., & Tang, B. (2023). The impact of boarding schools on the development of cognitive and non-cognitive abilities in adolescents. *BMC Public Health*, 23(1), 1852. <https://doi.org/10.1186/s12889-023-16748-8>
- Chen, Q., Pei, C. & Zhao, Q. (2018). Eating more but not better at school? Impacts of boarding on students' dietary structure and nutritional status in rural Northwestern China. *Sustainability*, 10(8), 2753. <https://doi.org/10.3390/su10082753>
- Cohen, L., Manion, L. & Morrison, K. (2017) *Research methods in education*. London: Routledge. <https://doi.org/10.4324/9781315456539>
- Darojat, S. (2023). Navigating tradition and innovation: A comprehensive study of organizational development in East Java's Islamic Boarding Schools. *Abjadia: International Journal of Education*, 8(2), 93–107. <https://doi.org/10.18860/abj.v8i2.22869>
- Erichsen, J. & Waldow, F. (2020). Fragile legitimacy: Exclusive boarding schools between the meritocratic norm and their clientele's desire for a competitive advantage. *European Education*, 52(2), 102–116. <https://doi.org/10.1080/10564934.2020.1723420>
- Gofar, N. (2020). Punishment pattern in Islamic boarding school. *Conciencia*, 20(1), 52–65.

- <https://doi.org/10.19109/conciencia.v20i1.5703>
- Hamid, A. M. (2023). Pemberdayaan ekonomi syariah berbasis santripreneur (Kasus di Pondok Pesantren Darul Hikmah Desa Gumantuk Maduran Lamongan). *HUMANIS: Jurnal Ilmu-Ilmu Sosial dan Humaniora*, 15(1), 55–66. <https://doi.org/10.52166/humanis.v15i1.3943>
- Hanafi, Y., Taufiq, A., Saefi, M., ..., Diyana, T. N., & Thoriquttyas, T. (2021). The new identity of Indonesian Islamic boarding schools in the “new normal”: the education leadership response to COVID-19. *Heliyon*, 7(3), e06549. <https://doi.org/10.1016/j.heliyon.2021.e06549>
- Handayani, D., Ibad, M., Sulistiyani, E., Sukmaningtyas, A. Z., Auliya, O. I., Hasanah, S., Al-Faizi, N. M. A., & Iryawan, R. D. A. (2022). Community empowerment through utilization of information technology to improve management of health introspection at An-Nur Student Islamic Boarding School. *Community Development Journal*, 6(3), 72–78. <https://doi.org/10.33086/cdj.v6i3.3608>
- Hannan, A. (2019). Santripreneurship and local wisdom: economic creative of Pesantren Miftahul Ulum. *Shirkah: Journal of Economics and Business*, 4(2), 175-202. <https://doi.org/10.22515/shirkah.v4i2.267>
- Hastasari, C., Setiawan, B. & Aw, S. (2022). Students’ communication patterns of islamic boarding schools: the case of Students in Muallimin Muhammadiyah Yogyakarta. *Heliyon*, 8(1), e08824. <https://doi.org/10.1016/j.heliyon.2022.e08824>
- Iskandar, A., Rusydi, I., Amin, H., Hakim, M. N., & Haqq, H. A. (2022). Strategic management in improving the quality of education in boarding school. *AL-ISHLAH: Jurnal Pendidikan*, 14(4), 7229–7238. <https://doi.org/10.35445/alishlah.v14i4.2075>
- Istiqomah, N. A. & Setiawan, F. (2021). Realizing the purpose of Islamic education through boarding school management. *JISAE: Journal of Indonesian Student Assessment and Evaluation*, 7(1), pp. 30–37. <https://doi.org/10.21009/jisae.v7i1.19032>
- Jeptanui, N., Ogeta, N., & Nderitu, J. (2022). Effect of direct costs of education on students' transition rate in public boarding secondary schools in Kenya. *Journal of Education*, 5(5), 81–92. <https://doi.org/10.53819/81018102t2110>
- Kali, S. & Das, S. (2021). Smart classroom and e-learning. *International Journal of English Learning & Teaching Skills*, 3(4), 2417–2438. <https://doi.org/10.15864/ijelts.3401>
- Maemunah, Y. & Wahyudi, U. R. (2022). Pengaruh lingkungan pendidikan Islami terhadap karakter anak usia sekolah. *ANWARUL*, 2(6), 521–528. <https://doi.org/10.58578/anwarul.v2i6.771>
- Mallillin, L. L. D. & Caranguian, R. G. (2023). Management of educational system and practice: A guide to academic transformation. *British Journal of Arts and Humanities*, 5(3), 131–141. <https://doi.org/10.34104/bjah.02301310141>
- Mardi, M., Syam, N., Khumaidah, S., & Humaidi, H. (2023). Characteristics of Islamic boarding school students. *Al-Irfan: Journal of Arabic Literature and Islamic Studies*, 6(1), 45–63. <https://doi.org/10.58223/alirfan.v6i1.6644>
- McCalman, J., Benveniste, T., Wenitong, M., Saunders, V., & Hunter, E. (2020). It’s all about relationships: The place of boarding schools in promoting and managing health and

- wellbeing of Aboriginal and Torres Strait Islander secondary school students. *Children and Youth Services Review*, 113, 104954. <https://doi.org/10.1016/j.childyouth.2020.104954>
- Muslim, S. (2022). Analysis Juridical: Collaboration of Pesantren-Regional Governments in Education and Community Empowerment Functions. *Syaikhuna: Jurnal Pendidikan dan Pranata Islam*, 13(1), 41–53. <https://doi.org/10.36835/syaikhuna.v13i01.5571>
- Nawas, A., Darmawan, I. G. N., & Maadad, N. (2024). Single-sex “Pesantren” schools: Unravelling girls’ and boys’ peer connections and their impacts on wellbeing and learning outcomes. *International Journal of Educational Research*, 125, 102339. <https://doi.org/10.1016/j.ijer.2024.102339>
- Nuraeni, S. F. C. (2020). Single-sex education: Does it make a difference to student academic achievement? *IJIE (International Journal of Indonesian Education and Teaching)*, 4(2), 296–305. <https://doi.org/10.24071/ijiet.v4i2.2223>
- Pratiwi, L., Nurhayati, T., Patimah, P., & Atikoh, N. (2020). The effect of independence education in Islamic boarding school on the development of emotional intelligence of elementary school students. *Al Ibtida: Jurnal Pendidikan Guru MI*, 7(1), 85-99. <https://doi.org/10.24235/al.ibtida.snj.v7i1.5147>
- Qin, J., Li, D., & Yang, F. (2024). Spatial and emotional distances in parent-child relationships: Impacts on human capital development in rural Chinese boarding children. *Acta Psychologica*, 246, 104283. <https://doi.org/10.1016/j.actpsy.2024.104283>
- Rahman, F., Amanda, S. E., & Nada, C. (2023). Empowering Islamic boarding school students with an introductory IELTS program. *Asian Journal of Community Services*, 2(8), 645–652. <https://doi.org/10.55927/ajcs.v2i8.5612>
- Rahmatullah, A. & Baharun, S. (2023). Ta’zir (punishment) at Islamic boarding schools; Between tradition, conception, and shadows of human rights violations. *Tribakti: Jurnal Pemikiran Keislaman*, 34(2), 267–280. <https://doi.org/10.33367/tribakti.v34i2.3517>
- Ramadhaniah, P., Inayyah, M., Dini, A., Ramadhanti, M., & Nisa, N. U. (2023). Case studies of violence against children in muslim residential schools. *International Journal of Southeast Asian Studies (IJSAS)*, 2(2), 70–73. <https://doi.org/10.20527/ijzas.v2i2.29>
- Redman-MacLaren, M., Benveniste, T, McCalman, J., Rutherford, K., Britton, A., Langham, E., Stewart, R., Saunders, P., Kinchin, I., & Bainbridge, R. (2019). Through the eyes of students: the satisfaction of remote Indigenous boarding students’ with a transition support service in Queensland, Australia. *The Australian Journal of Indigenous Education*, 50(1), 95–106. <https://doi.org/10.1017/jie.2019.3>
- Retnowuni, A. & Yani, A. L. (2022). Ekplorasi pelaku bullying di pesantren. *Borobudur Nursing Review*, 2(2), 118–126. <https://doi.org/10.31603/bnur.7356>
- Rumainur, R., Fauzan, U., & Malihah, N. (2022). Characteristics of Islamic religious education in boarding school curriculum. *Southeast Asian Journal of Islamic Education*, 4(2), 197–207. <https://doi.org/10.21093/sajie.v4i2.4593>
- Saefudin, S. (2021). The shift in the tradition of Islamic education in Indonesia from the 19th century to the early 21st century. *IBDA` : Jurnal Kajian Islam dan Budaya*, 19(1), 1–23.

- <https://doi.org/10.24090/ibda.v19i1.4391>
- Sauri, S., Gunara, S., & Cipta, F. (2022). Establishing the identity of insan kamil generation through music learning activities in pesantren. *Heliyon*, 8(7), e09958. <https://doi.org/10.1016/j.heliyon.2022.e09958>
- Shi, Y. (2020). Who benefits from selective education? Evidence from elite boarding school admissions. *Economics of Education Review*, 74, 101907. <https://doi.org/10.1016/j.econedurev.2019.07.001>
- Shohib, M. & Narsim, N. (2023). Society 5.0; tuntutan strategi pendidikan entrepreneurship di pesantren melalui SOAR Analysis. *Idarotuna : Journal of Administrative Science*, 3(2), 168–186. <https://doi.org/10.54471/idarotuna.v3i2.38>
- Sihidi, I. T. & Amirudin, Z. (2022). Anti-bullying campaign at the Mambaus Sholihin Islamic Boarding School 2 Blitar. *Community Empowerment*, 7(3), 434–441. <https://doi.org/10.31603/ce.5788>
- Subhani, S., Yani, A., Arifin, A., Aisyah, T., Kamaruddin, K., & Alfiady, T. (2018). Student radicalism ideology prevention strategy: A study at an Islamic boarding school in Jabal Nur, North Aceh, Indonesia. in *Proceedings of MICoMS 2017*, 1, 401–407. <https://doi.org/10.1108/978-1-78756-793-1-00019>
- Sumari, N. S., Tanveer, H., Shao, Z., & Kira, E. S. (2019). Geospatial distribution and accessibility of primary and secondary schools: A case of Abbottabad City, Pakistan. *Proceedings of the ICA*, 2, 1–11. <https://doi.org/10.5194/ica-proc-2-125-2019>
- Supriyanto, S. & Amrin, A. (2022). Concepts and paradigms of Islamic education in Indonesian Islamic boarding schools (Study at Al-Mukmin Ngruki Islamic Boarding School). *International Journal Of Humanities Education and Social Sciences (IJHESS)*, 2(2). <https://doi.org/10.55227/ijhess.v2i2.257>
- Suwarno, S. & Chasanah, U. (2021). Islamic boarding schools and human rights enforcement transmission of cultural values for disabilities. *Jurnal Konseling dan Pendidikan*, 9(3), 266-270. <https://doi.org/10.29210/165500>
- Tabroni, I., Fatimah, D., Hidayat, M. F., & Nurul, S. H. (2022). Islamic religious education based on boarding school of MTs Al-Fatah Tegalwaru. *Education: Jurnal Sosial Humaniora dan Pendidikan*, 2(1), 10–13. <https://doi.org/10.51903/education.v2i1.98>
- Thelma, C. C. (2023). Academic performance of learners at co- and single sex schools: A case of selected secondary schools in Kasama District of Northern Province, Zambia. *World Journal of Advanced Research and Reviews*, 19(2), 1474–1483. <https://doi.org/10.30574/wjarr.2023.19.2.1761>
- Vieira, C., Vieira, I. & Raposo, L. (2018). Distance and academic performance in higher education. *Spatial Economic Analysis*, 13(1), 60–79. <https://doi.org/10.1080/17421772.2017.1369146>
- Vigar-Ellis, D. (2013). Boys’ boarding school management: understanding the choice criteria of parents. *South African Journal of Education*, 33(1), 1–15. <https://doi.org/10.15700/saje.v33n1a447>
- Wahab, W., Taruna, M., & Muntakhib, A. (2021). How to build students’ characters based on child-friendly education (Collaboration study of MAN 2 Yogyakarta with Ainul

- Yaqin Islamic Boarding School Gunungkidul). in *Proceedings of the 2nd International Conference on Religion and Education, INCRE 2020, 11-12 November 2020, Jakarta, Indonesia*. <https://doi.org/10.4108/eai.11-11-2020.2308197>
- Wakhid, A. A., Qohar, A., & Setiawan, N. A. (2020). Aggressive behavior of students from the perspective of self-control and Islamic boarding school (pesantren) culture. in *Proceedings of the 1st Raden Intan International Conference on Muslim Societies and Social Sciences (RIICMuSSS 2019)*, 118–123. <https://doi.org/10.2991/assehr.k.201113.022>
- White, P. M. & Lee, D. M. (2020). Geographic inequalities and access to higher education: Is the proximity to higher education institution associated with the probability of attendance in England? *Research in Higher Education*, 61(7), 825–848. <https://doi.org/10.1007/s11162-019-09563-x>
- Yang, C., Pan, X., Zhao, Y., Wang, X., Wang, Z., & Ren, X. (2023). Snacking behaviour and nutrients intake among 11-16 years-old students from two different boarding system schools. *Heliyon*, 9(3), e14517. <https://doi.org/10.1016/j.heliyon.2023.e14517>
- Zuhri, M. M., Rokhman, F., Nuryatin, A., & Raharjo, T. J. (2021). The challenges of industrial revolution 4.0: The role of leadership of kyai in Islamic boarding schools. *European Journal of Business and Management*, 13(22), 49–53. <https://doi.org/10.7176/EJBM/13-22-06>