

Management of Facilities, Infrastructure and Human Resources for Optimizing Learning in *Dayah*

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Abstract :

The importance of facilities, infrastructure and human resource management in creating a quality learning environment, especially at *Dayah* as a traditional Islamic educational institution which faces various limitations. This research discusses the management of facilities, infrastructure and human resources (HR) in *Dayah* to increase learning effectiveness. *Dayah*, as a traditional Islamic educational institution in Aceh, faces challenges in managing facilities and human resources which are often limited. This research aims to evaluate the condition of facilities and infrastructure, HR management, and their contribution to the quality of learning. A qualitative approach is used through case studies. Data was obtained through observation, interviews with related informants, and documentation. The research results show that the management of facilities and infrastructure is not optimal, characterized by a lack of adequate planning, maintenance and distribution of facilities. On the other hand, human resource management, including teacher placement and training, plays an important role in utilizing facilities to support learning. Inhibiting factors include limited budget, space, and attention to facility maintenance. Synergistic management between facilities, infrastructure and human resources can create a conducive learning environment, improve the quality of education, and support the achievement of *Dayah's* vision as a superior Islamic educational institution. An integrated strategy is needed to overcome challenges and improve the quality of education in *Dayah*. It is hoped that this research can become a basis for policy makers, *Dayah* managers and other stakeholders in formulating more effective strategies for managing facilities, infrastructure and human resources, so as to improve the quality of learning and create a more sustainable education system.

Keywords: *Management, Facilities and Infrastructure, Human Resources, Dayah, Learning, Islamic Education*

Abstrak :

Pentingnya sarana, prasarana, dan pengelolaan SDM dalam menciptakan lingkungan belajar yang berkualitas, terutama di *Dayah* sebagai lembaga pendidikan Islam tradisional yang menghadapi berbagai keterbatasan. Penelitian ini membahas manajemen sarana, prasarana, dan sumber daya manusia (SDM) di *Dayah* untuk meningkatkan efektivitas pembelajaran. *Dayah*, sebagai lembaga pendidikan Islam tradisional di Aceh, menghadapi tantangan dalam pengelolaan fasilitas dan SDM yang sering kali terbatas. Penelitian ini bertujuan untuk mengevaluasi kondisi sarana dan prasarana, manajemen SDM, serta kontribusinya terhadap kualitas pembelajaran. Pendekatan kualitatif digunakan melalui studi kasus. Data diperoleh melalui observasi, wawancara dengan informan terkait, dan dokumentasi. Hasil penelitian menunjukkan bahwa pengelolaan sarana dan prasarana belum optimal, ditandai dengan kurangnya

perencanaan, pemeliharaan, dan distribusi fasilitas yang memadai. Di sisi lain, pengelolaan SDM, termasuk penempatan guru dan pelatihan, berperan penting dalam pemanfaatan fasilitas untuk mendukung pembelajaran. Faktor-faktor penghambat meliputi keterbatasan anggaran, ruang, dan perhatian terhadap pemeliharaan fasilitas. Pengelolaan yang sinergis antara sarana, prasarana, dan SDM dapat menciptakan lingkungan belajar yang kondusif, meningkatkan kualitas pendidikan, dan mendukung pencapaian visi *Dayah* sebagai lembaga pendidikan Islam unggul. Strategi yang terintegrasi diperlukan untuk mengatasi tantangan dan meningkatkan mutu pendidikan di *Dayah*. Penelitian ini diharapkan dapat menjadi landasan bagi pengambil kebijakan, pengelola *Dayah*, dan pemangku kepentingan lainnya dalam merumuskan strategi pengelolaan sarana, prasarana, dan SDM yang lebih efektif, sehingga dapat meningkatkan kualitas pembelajaran dan menciptakan sistem pendidikan yang lebih berkelanjutan.

Kata Kunci: Manajemen, Sarana dan Prasarana, SDM, *Dayah*, Pembelajaran, Pendidikan Islam

INTRODUCTION

Dayah in Aceh is a traditional Islamic educational institution that aims to educate students (*Aneuk Dayah*) to have an Islamic personality and be able to contribute positively to religion, society, nation, and state.¹ The managers of educational institutions, including Islamic boarding schools/*Dayahs*, are expected to be able to manage the needs of facilities and infrastructure independently according to their respective abilities and needs. This process needs to involve the aspirations and participation of various parties in the Islamic boarding school environment but still refer to the rules and national education laws that set minimum standards.² The goal is to improve the quality of education in all types and levels of education. Referring to Government Regulation of the Republic of Indonesia Number 19 of 2005 Article 1 concerning Standards for Facilities and Infrastructure, the standard is a national reference that regulates the minimum criteria for the facilities required. This standard includes study rooms, sports facilities, places of worship, libraries, laboratories, workshops, play areas, recreation areas, and other learning resources, including information and communication technology, all of which aim to support the learning process.³

The condition of facilities and infrastructure in *Dayah*, as one of the traditional Islamic educational institutions in Indonesia, still needs more attention to be improved. Although there are several *Dayahs* that already have adequate facilities, many of them still face various limitations, especially in terms of infrastructure and supporting facilities for the learning process. Management of facilities and infrastructure has not been running optimally. This has an impact on the low quality of education in these days. One of the main challenges is the lack of good planning and adequate maintenance of facilities.

Learning facilities and infrastructure, the quality of human resources, have a significant influence on the interest of students in learning, with a contribution of 48.6% to increasing their motivation to learn. This means that the better the

¹ Muhammad Azhari and Jailani Jailani, "Kontribusi Dinas Pendidikan *Dayah* Aceh Dalam Pengembangan Kurikulum *Dayah* Salafiyah Terpadu," *Fitrah: Journal of Islamic Education* 4, no. 1 (June 25, 2023): 26–42, <https://doi.org/10.53802/fitrah.v4i1.131>.

² Dewi Agustina et al., "Konstruksi Pemahaman Pentingnya Sarana Prasarana Di Sekolah," *Edumaspul: Jurnal Pendidikan* 6, no. 1 (2022): 1352–59, <https://doi.org/10.33487/edumaspul.v6i1.4202>.

³ Ratna Maya Sari and Agus Salim Salabi, "Implementasi Manajemen Sarana Dan Prasarana Di Pesantren: Studi Kasus *Dayah* Terpadu Al-Muslimun Lhoksukon Aceh Utara," *ITQAN: Jurnal Ilmu-Ilmu Kependidikan* 13, no. 2 (December 31, 2022): 255–66, <https://doi.org/10.47766/itqan.v13i2.771>.

educational facilities, the more professional the teaching staff, and the more disciplined the teachers are in carrying out their duties, the higher the enthusiasm of the students to learn.⁴ On the other hand, a visit by members of the Aceh People's Representative Council (DPRA) to a number of *Dayah* also revealed that many Islamic educational institutions still lack facilities. In fact, some of the available facilities are considered unfit for use. To overcome this problem, strategic steps are needed, such as more structured planning, procurement of facilities that are in accordance with needs, and routine maintenance.⁵

School facilities play an important role in supporting the success of the teaching and learning process. Based on the data, around 30% of students stated that the available facilities were adequate. In addition, the management of educational facilities and infrastructure has a significant impact on the effectiveness of learning, with the contribution of the management variable of facilities and infrastructure reaching 36.3% to increasing the effectiveness of the learning process.⁶ The gap between the need and availability of educational facilities and infrastructure in Indonesia is still a major problem that affects the quality of the teaching and learning process. Therefore, strategic steps are needed such as equalizing educational facility assistance and more sustainable planning to overcome this gap and improve the quality of education throughout Indonesia.⁷

Effective human resource (HR) management plays an important role in supporting the optimization of learning in *Dayah*, especially since teachers are the main element in the success of education. Proper HR management must be integrated with the management of facilities and infrastructure. Competent and well-managed teachers are able to utilize facilities such as classrooms, libraries, and educational technology optimally to improve the quality of learning. In addition, the process of managing HR potential, which includes competency assessment, training, and appropriate placement, also ensures that learning needs in *Dayah* can be met effectively. Thus, HR management that is synergistic with facilities and infrastructure is the key to creating a conducive learning environment and supporting the achievement of educational goals in *Dayah*.⁸

Human resource (HR) planning in *Dayah* often faces various obstacles that prevent it from running as expected. Some of the main factors that cause this are budget constraints, changes in organizational policies, and difficulties in recruiting qualified educators according to needs. This study offers a new perspective by emphasizing the importance of integration between HR management and infrastructure. In addition, the long recruitment process and frequent policy changes are also obstacles in HR management. To overcome these challenges, this study

⁴ Muhammad Isa, M Yusuf, and Mai Simahatie, "Analisis Minat Belajar Santri Berdasarkan Faktor Sarana Prasarana, Profesionalisme Guru Dan Disiplin Kerja Guru (Studi Pada *Dayah* Tauthiatuth Thullab Putri Arongan Kabupaten Bireuen)," *Singkite Journal* 3, no. 1 (2024): 11-18.

⁵ Harianrakyataceh.com, "Nora Perjuangkan Sarana Dan Prasarana *Dayah*," *harianrakyataceh.com*, 2022, https://harianrakyataceh.com/2022/01/28/nora-perjuangkan-sarana-dan-prasarana-Dayah/?utm_source=chatgpt.com.

⁶ Srifariyati Srifariyati, Oni Marlina Susianti, and Lukman Lukman, "Manajemen Sarana Prasarana Dalam Menunjang Proses Pembelajaran," *Thawalib: Jurnal Kependidikan Islam* 5, no. 1 (April 5, 2024): 183-94, <https://doi.org/10.54150/thawalib.v5i1.339>.

⁷ Mita Tri Wahyuni, Virna Dwi Agustin, and Saniyatus Safaah, "Analisis Kesenjangan Kualitas Sarana Dan Prasarana Pendidikan Di Sekolah Dasar," *JIPDAS (Jurnal Ilmiah Pendidikan Dasar)* 2, no. 1 (2023): 75-85.

⁸ Devi Sartika, Jumira Warlizasusi, and Elce Purwandari, "Peran Manajemen Sumber Daya Manusia Dalam Peningkatan Mutu Pendidikan Madrasah," *Dirasah: Jurnal Studi Ilmu Dan Manajemen Pendidikan Islam* 6, no. 2 (2023): 488-94, <https://doi.org/10.58401/dirasah.v6i2.862>.

offers concrete solutions to improve the effectiveness of HR management strategies and optimize facilities and infrastructure in *Dayah*.

Research conducted by Isa et al. found that infrastructure, teacher professionalism, and educational staff discipline contributed 48.6% to increasing student interest in learning.⁹ Meanwhile, Sartika et al. emphasized that effective human resource management, through strict selection, continuous training, and performance evaluation, plays an important role in improving the quality of education.¹⁰ Al Qadri et al. strengthened this finding by highlighting that selective recruitment and placement of teachers according to competency can improve the professionalism of educational staff.¹¹ Puteri et al. added that despite progress, human resource management in Islamic educational institutions still needs to be improved sustainably.¹² Apiyani also emphasized the importance of human resource development that includes improving technological skills and problem-solving abilities.¹³ This study strengthens previous findings by highlighting that integration between facility management and human resources can create a more optimal learning environment so that Islamic education can develop sustainably and be more adaptive to changes in the times.

In developing human resources in the field of education, various challenges must be faced, especially in planning teaching and education personnel so that work productivity can increase. Previous research revealed that the main obstacle in human resource planning is the lack of adequate facilities and infrastructure. However, this study found another inhibiting factor, namely the low awareness of teaching and education personnel to continue learning and developing their competencies. Therefore, this study explores various strategies in human resource management to overcome these obstacles so that the quality of education continues to improve. Different from previous studies that discussed more about limited facilities, this study offers practical solutions with more systematic human resource planning, improving the quality of teaching staff, and synergy between facility and human resource management to create a more conducive and quality learning environment.

RESEARCH METHOD

This study uses a qualitative research type with a case study approach to determine the facilities and infrastructure used and HR management used in improving learning for students in Islamic boarding schools or *Dayahs*.¹⁴ Data collection methods are carried out in several ways. First, observation of the condition

⁹ Isa, Yusuf, and Simahatie, "Analisis Minat Belajar Santri Berdasarkan Faktor Sarana Prasarana, Profesionalisme Guru Dan Disiplin Kerja Guru (Studi Pada *Dayah* Tauthiatuth Thullab Putri Arongan Kabupaten Bireuen)."

¹⁰ Sartika, Warlizasusi, and Purwandari, "Peran Manajemen Sumber Daya Manusia Dalam Peningkatan Mutu Pendidikan Madrasah."

¹¹ Muhammad Al Qadri et al., "Manajemen SDM Untuk Meningkatkan Profesionalitas Guru Pendidikan Islam Di *Dayah* Terpadu Ulumuddin," *Meureunoe: Journal of Islamic Studies* 1, no. 1 (2025): 1-10.

¹² Rasdica Denara Hernowo Puteri et al., "Manajemen Sumber Daya Manusia Dalam Peningkatan Mutu Pendidikan Di DTA Jariyatul Mu'minin," *Community Empowerment: Jurnal Pengabdian Dan Pemberdayaan Masyarakat* 1, no. 2 (May 14, 2024): 77-83, <https://doi.org/10.15575/commen.v1i2.640>.

¹³ Ani Apiyani, "Optimalisasi Manajemen Sumber Daya Manusia Dalam Pendidikan Islam," *Jurnal Tahsinia* 5, no. 4 (2024): 499-511, <https://doi.org/10.57171/jt.v5i4.198>.

¹⁴ Santy Dinar Permata and Tri Wardati Khususiyah, "Pemanfaatan Sumber Belajar Untuk Meningkatkan Literasi Sains Sekolah Dasar (Studi Kasus Di Kecamatan Tegalrejo Yogyakarta)," *Jurnal Pendidikan Modern* 7, no. 2 (January 30, 2022): 75-81, <https://doi.org/10.37471/jpm.v7i2.431>.

of facilities and infrastructure in *Dayah*, starting from the condition of the building to the availability of educational game tools that support the learning process. Second, interviews with informants to obtain information related to planning, procurement, management, and use; the elimination of facilities and infrastructure in *Dayah*; as well as factors that support and hinder its implementation. Third, documentation in the form of collecting photos and documents related to the condition of facilities and infrastructure and HR management used in *Dayah*.¹⁵

FINDINGS AND DISCUSSION

Dayah is one of the oldest Islamic educational institutions in Aceh and even in Indonesia, which grew and developed along with the entry of Islam into the region. As an institution that has existed since before the arrival of the Dutch, *Dayah* functions as a special education center. At the beginning of the development of Islamic education, the term *zawiyah* was used to describe this type of institution, which later developed into *madrasah*. The term comes from religious studies that are often called *ribath* (bond), *khanqah*, *zawiyah* (corner), or *turbah*. Acehese scholars who studied in Mecca, Cairo, and Damascus brought this term to Aceh, adapting a learning system that focuses on the *fiqh* of the *Syafi'i* school, which became the dominant school in Aceh and Southeast Asia. In addition, many scholars from the Middle East, such as Arabia, Egypt, Persia, Gujarat, and Malabar, have come to Aceh since the era of the Pasai Kingdom, including the ancestors of Sheikh Abdurrauf As-Singkily or Teungku Syiah Kuala.

In terminology, *Dayah* is a formal educational institution with students living in *pondok*, focusing on lessons based on Islamic teachings and other knowledge. Initially, *Dayah* was built on the personal initiative of Acehese scholars without involving foundations, so its existence depended on the existence of scholars who had ideas, awareness, and the ability to manage it. Therefore, not all regions have *Dayah*. *Dayah* education in Aceh can be divided into two levels, namely middle and high levels. Students who study at the middle level usually live in the *Dayah* area, where they are responsible for their daily needs, such as cooking and washing clothes. This middle level is often referred to as *rangkang*, and the teachers are known as *teungku rangkang*. These teachers are generally high-level students who study at an institution called *bale*. The existence of *Dayah* as a center of education shows its important role in forming a generation that adheres to Islamic teachings and intellectual traditions rooted in local culture and Middle Eastern influences.¹⁶

Facilities and infrastructure management is a process that is oriented towards the management and maintenance of educational facilities to support the smoothness and success of the learning process. This process includes various steps, such as planning, procurement, supervision, inventory recording, maintenance, to the elimination of facilities that are no longer used. The main objective of this management is to ensure that all educational facilities and infrastructure can be utilized optimally, effectively, and efficiently to support various learning activities.¹⁷

¹⁵ Srifariyati, Susianti, and Lukman, "Manajemen Sarana Prasarana Dalam Menunjang Proses Pembelajaran."

¹⁶ Mariyati Mariyati, Zuhri Arif, and Syah Wardi, "Perkembangan *Dayah* Dalam Tradisi Masyarakat Aceh: Kontribusi Kualitas Pendidikan Masyarakat," *Jurnal Tahsinia* 5, no. 5 (2024): 731-41, <https://doi.org/10.57171/jt.v5i5.567>.

¹⁷ Sari Famularsiah et al., "Facility And Infrastructure Management At The International Class Program Of The State Islamic University In Indonesia," *Journal Of Social Studies Education Research* 13, no. 4 (2022): 291-307.

Educational facilities and infrastructure are one of the main components that support the achievement of educational goals. In teaching and learning activities, there are five main factors that need to be met, namely educators, students, goals, materials, and time. If one of these factors is not met, the teaching and learning process cannot run well. Even with limitations, teaching and learning activities can still be carried out, but the results tend to be minimal. These results can be improved if there is adequate support for educational facilities and infrastructure. The learning process will take place more effectively if the available facilities are utilized optimally. However, the use of facilities and infrastructure cannot be separated from the application of appropriate learning strategies. With the right strategy, the use of these facilities can support the achievement of learning goals and ensure that the teaching and learning process runs well.¹⁸

The management of facilities and infrastructure has the main objective to provide professional services that support the smooth running of the learning process effectively. In the context of *Dayah* or Islamic boarding schools, this management aims to meet the needs of the institution through careful planning and procurement of facilities, so that the Islamic boarding school has adequate facilities and infrastructure and in accordance with needs. In addition, the use of facilities and infrastructure must be carried out appropriately and efficiently in order to provide maximum benefits for all parties. No less important, management also aims to maintain and care for these facilities so that they are always ready to use whenever needed. With good management, Islamic boarding schools can create a learning environment that supports the development of students optimally.¹⁹

Good management of facilities and infrastructure plays an important role in creating a quality learning environment. The availability of adequate facilities and infrastructure, as well as their optimal use, can support a conducive, effective, and enjoyable learning process for students. However, there are a number of challenges in optimizing the management of facilities and infrastructure. First, budget constraints are the main obstacle in the procurement and maintenance of facilities and infrastructure. Second, limited space causes the use of facilities not to run optimally. Third, technical problems such as unstable internet connections often hinder the use of technology-based facilities. Finally, maintenance of facilities and infrastructure requires special attention and additional costs to ensure that their condition remains optimal.²⁰

Problems related to educational facilities and infrastructure still often occur, especially in terms of suboptimal utilization of assistance; even some facilities cannot be used properly. This is influenced by various factors, such as minimal efforts to maintain available facilities and the lack of competent management personnel. Many parties are less aware of the importance of maintaining and caring for facilities, so that in the end this contributes to the decline in the quality of existing facilities. In addition, the lack of adequate management also makes these facilities unkempt and

¹⁸ Maulidiah amirul and Fiihn Naili Rizkiyah, "Manajemen Sarana Prasarana Sekolah Dalam Meningkatkan Mutu Pendidikan Di SD 004 Bengalon Kutai Timur," *Nidhomiyah: Jurnal Manajemen Pendidikan Islam* 3, no. 1 (January 1, 2022): 43-51, <https://doi.org/10.38073/nidhomiyah.v3i1.812>.

¹⁹ Muhlil Musolin, "Manajemen Sarana Dan Prasarana Pendidikan Pondok Pesantren: Studi Kasus Pondok Pesantren An Nawawi Berjan Purworejo," *Dirasat: Jurnal Manajemen Dan Pendidikan Islam* 5, no. 2 (2019): 148-62, <https://doi.org/10.26594/dirasat.v5i2.1811>.

²⁰ Bella Bunda, "Manajemen Sarana Dan Prasarana Dalam Meningkatkan Perkembangan Pembelajaran," *Journal of Education Research* 5, no. 2 (May 21, 2024), <https://doi.org/10.37985/jer.v5i2.1038>.

not used effectively.²¹

Optimizing educational facilities and infrastructure plays an important role in supporting the effectiveness of learning. By improving the quality of learning facilities, such as appropriate learning technology and routine maintenance, a conducive learning environment can be created. This allows students to learn more efficiently, which ultimately improves the quality of learning. In addition, adequate and well-maintained facilities also have a positive effect on student motivation, because they make them feel appreciated and supported during the learning process. Not only that, the existence of complete facilities allows teachers to apply more diverse and innovative learning methods, so that students can get interesting learning experiences and strengthen their understanding of the material. Optimal use of facilities also supports improving student learning achievement, for example through practical activities or access to wider learning resources. In addition, optimal management of facilities and infrastructure can support the creation of inclusive learning. Thus, all students, including those with special needs, can learn together in a supportive environment that is able to meet their needs.²²

Classroom conditions have a major impact on student learning outcomes, especially through the comfort and safety factors of the learning environment. A well-maintained, clean, and comfortable classroom can help students to focus more during the learning process. Conversely, classrooms that are in poor, damaged, or uncomfortable conditions can cause anxiety in students and disrupt their concentration. Therefore, maintaining classroom conditions to support a positive learning atmosphere is very important to improve the quality of learning.²³

Dayah in Aceh has its own uniqueness, marked by simple halls and huts used as residences for students. The learning process in *Dayah* is designed to be interactive, inspiring, fun, and challenging, so as to encourage students to actively participate according to their talents, interests, and physical and psychological development. In its implementation, several things need to be considered, such as the maximum number of students in one class, the appropriate teaching load for each educator, and the provision of books for each student. The ratio between students and educators is also taken into account to ensure the effectiveness of the learning process. In addition, the culture of reading and writing continues to be developed to improve the quality of education while forming independent and knowledgeable students.²⁴

To make a *Dayah* or Islamic boarding school a superior institution, a mature and planned strategy is needed. Strategy is a long-term plan designed in detail, including measurable operational steps to achieve targets efficiently and productively. The essence of strategy is to plan the actions that need to be taken to

²¹ Arianti Prialita et al., "Manajemen Sarana Dan Prasarana Pendidikan Dalam Meningkatkan Kualitas Belajar Pendidikan Agama Islam," *EDUSAINTEK: Jurnal Pendidikan, Sains Dan Teknologi* 11, no. 3 (June 8, 2024): 1599–1610, <https://doi.org/10.47668/edusaintek.v11i3.1302>.

²² Tarman Tarman et al., "Optimalisasi Pengelolaan Sarana Dan Prasarana Untuk Meningkatkan Efektivitas Pembelajaran Di Sekolah Dasar Islam," *El Buhuth: Borneo Journal of Islamic Studies*, June 30, 2024, 509–26, <https://doi.org/10.21093/el-buhuth.v6i2.8816>.

²³ Nugrahana Fitria Ruhyana and Ani Nur Aeni, "Effect of Educational Facilities and Infrastructure in Primary Schools on Students' Learning Outcomes.," in *Elementary School Forum (Mimbar Sekolah Dasar)*, vol. 6 (ERIC, 2019), 43–54.

²⁴ Edimizwar and Mawaddatur Rahmah, "Manajemen Sarana Dan Prasarana Dalam Menunjang Proses Pembelajaran Di *Dayah* Tauthiatuth Thullab Arongan Putri," *Indonesian Journal of Islamic and Social Science* 1, no. 1 (June 25, 2023): 49–56, <https://doi.org/10.71025/9mfjdr91>.

achieve goals, not just to record what has been done or achieved. One important aspect in realizing a superior Islamic boarding school is the management of educational facilities and infrastructure. Adequate facilities greatly support an effective teaching and learning process and create a comfortable and safe environment for both teachers and students. With good management, Islamic boarding schools can improve the quality of education and meet the needs of students optimally.²⁵

Facilities and infrastructure play an important role in supporting the educational process, both for teachers and students. Without adequate facilities, the effectiveness of learning activities is difficult to achieve. With the availability of appropriate facilities, information and learning materials can be delivered more clearly, which ultimately facilitates the learning process and improves its results. In addition, the use of appropriate facilities can also attract students' attention, create a more interesting learning atmosphere, and motivate them to learn with more enthusiasm and passion.²⁶

Management of facilities and infrastructure includes regular evaluations to ensure that the available facilities are in accordance with the standards set out in higher education regulations. This activity involves collecting data from various related units to plan infrastructure development in line with the needs of the institution. In addition, facility maintenance, including repairs and replacements, is carried out periodically to ensure that quality is maintained and educational facilities can be used sustainably.²⁷

Adequate facilities and infrastructure are very important to support the learning process in educational institutions. Therefore, a good management strategy is needed so that the facilities are well organized and in accordance with the objectives of the institution. The main objectives of managing facilities and infrastructure include: ensuring that procurement is carried out through careful planning, utilizing facilities appropriately and efficiently, and maintaining the condition of facilities and infrastructure so that they are always ready for use. The principles of management include achieving goals, efficiency, administrative compliance, clarity of responsibility, and cohesion. The management strategy involves several stages, namely planning, needs analysis, procurement, inventory, use, storage, maintenance, disposal, and evaluation and accountability reports. With the right strategy, educational institutions, including Islamic boarding schools, can ensure that facility management runs optimally to support the learning process.²⁸

Management of facilities and infrastructure in Islamic boarding schools generally involves several important stages to support the optimization of learning. The first stage is needs analysis and planning, where the responsible party conducts surveys, data collection, interviews, and discussions with each work unit to determine the needs of facilities and infrastructure that are in accordance with the

²⁵ Ja'far Ja'far, "Efektivitas Manajemen Pendidikan Sebagai Upaya Menuju Sekolah Unggulan," *Jurnal Inovatif Manajemen Pendidikan Islam* 1, no. 1 (July 25, 2022): 72–87, <https://doi.org/10.38073/jimpi.v1i1.665>.

²⁶ Isa, Yusuf, and Simahatie, "Analisis Minat Belajar Santri Berdasarkan Faktor Sarana Prasarana, Profesionalisme Guru Dan Disiplin Kerja Guru (Studi Pada *Dayah* Tauthiatuth Thullab Putri Arongan Kabupaten Bireuen)."

²⁷ Famularsih et al., "Facility And Infrastructure Management At The International Class Program Of The State Islamic University In Indonesia."

²⁸ Raihan Fikri and Syahrani Syahrani, "Strategi Pengembangan Sarana Dan Prasarana Pembelajaran Di Pondok Pesantren Rasyidiyah Khalidiyah (Rakha) Amuntai," *Educational Journal: General and Specific Research* 2, no. 1 (2022): 79–88.

objectives of the Islamic boarding school. The second stage is procurement, which is carried out by the relevant team with a report that is accountable to the leadership and management of the Islamic boarding school. The third stage is distribution, where facilities are distributed to each work unit based on the results of the initial needs analysis, with documentation in the form of photos and minutes of handover. Furthermore, the fourth stage is maintenance, which includes monthly asset data collection and handling of damage through routine repairs and maintenance. The last stage is inventory and disposal, which is carried out through an integrated and neat database system. The implementation of effective and efficient management of facilities and infrastructure has an impact on increasing the efficiency of time and energy, the quality of learning, student motivation, parental involvement in education, and the positive image of Islamic boarding schools in the community.²⁹

Having complete facilities and infrastructure alone is not enough to support the learning process without good management. Management of educational facilities and infrastructure is very important in improving the quality of educational institutions, because proper management can create a clean, orderly, and attractive environment. This will create a comfortable and pleasant atmosphere, not only for educators, but also for students, so that the teaching and learning process can run more effectively and efficiently.³⁰

Human resource management in Islamic education must be carried out comprehensively, including the recruitment process, competency development, leadership, performance management, utilization of technology, and collaboration with various related parties. These steps aim to improve the quality of education, encourage the involvement of parents of students, and build a culture that is in line with Islamic values. External challenges, such as technological advances, social, economic, and political policy changes, have a significant impact on human resource management in *Dayah*, so a quick and appropriate response is needed to ensure the sustainability of learning. In addition, internal challenges, such as the management of information systems and budgets, must also be addressed with effective management, so that infrastructure and human resources can be optimized to create quality learning and in accordance with the vision of *Dayah* as an educational institution based on Islamic values.³¹

As stated by Notoatmodjo, it is a strategic approach in planning, organizing, directing, and supervising various workforce activities in an organization. The main objective of this management is to ensure that every process related to HR runs effectively so that it can support the achievement of the organization's vision and mission.³² In the world of education, the challenges in managing human resources are increasingly complex along with the rapid development of technology. One of the main problems faced by educational institutions in Indonesia is the lack of readiness of educators in utilizing technology optimally. This study seeks to answer this challenge by highlighting strategies for optimizing human resources in Islamic educational institutions, especially in *Dayah*. This study not only discusses human

²⁹ Sari and Salabi, "Implementasi Manajemen Sarana Dan Prasarana Di Pesantren: Studi Kasus *Dayah* Terpadu Al-Muslimun Lhoksukon Aceh Utara."

³⁰ Tahang Tahang, "Implementasi Manajemen Sarana Dan Prasarana Dalam Meningkatkan Mutu Pendidikan Di Pondok Pesantren," *Al-Miskawaih: Journal of Science Education* 2, no. 2 (December 24, 2023): 235–54, <https://doi.org/10.56436/mijose.v2i2.275>.

³¹ Rusmita and Jamilus, "Manajemen Sumber Daya Manusia Dalam Pendidikan Islam : Strategi Dan Tantangan," *Jurnal Manajemen DIVERSIFIKASI* 4 (2024), <https://doi.org/10.24127/diversifikasi.v4i3.7201>.

³² R Sabrina, *Manajemen Sumber Daya Manusia*, ed. Emilda Sulasmi, vol. 1 (umsu press, 2021).

resource management from the aspects of planning and training, but also emphasizes the importance of technology integration in the educational process. With more structured and technology-based human resource management, it is hoped that Islamic educational institutions can improve the effectiveness of learning and the quality of their educators in a sustainable manner.³³

Management of facilities and infrastructure and human resources in *Dayah* has a strategic role in optimizing learning, especially through teacher placement based on individual expertise and potential. In this context, proper teacher placement not only ensures a match between teacher expertise and institutional needs, but also supports maximum utilization of facilities and infrastructure, such as classrooms, libraries, or other learning tools. In-depth competency assessment, mapping of institutional needs, and alignment with *Dayah* values and culture are important aspects in this process. With a holistic and data-based approach, integrated management of human resources and facilities and infrastructure can create a conducive learning environment, improve the quality of education, and support teacher career development as well as achieving *Dayah*'s vision as a superior Islamic educational institution.³⁴

Effective human resource (HR) management plays an important role in supporting the optimization of learning in *Dayah*, especially since teachers are the main element in the success of education. Proper HR management must be integrated with the management of facilities and infrastructure. Competent and well-managed teachers are able to utilize facilities such as classrooms, libraries, and educational technology optimally to improve the quality of learning. In addition, the process of managing HR potential, which includes competency assessment, training, and appropriate placement, also ensures that learning needs in *Dayah* can be met effectively. Thus, HR management that is synergistic with facilities and infrastructure is the key to creating a conducive learning environment and supporting the achievement of educational goals in *Dayah*.

The world of education, including *Dayah*, faces major challenges in managing human resources in order to adapt to developments in the era, especially in the use of technology. Teachers are the main assets in the world of education, so their management must be carried out systematically. The management of teacher HR includes various aspects, such as planning, recruitment, organizing, directing, training and development, compensation, performance evaluation, and the dismissal of educators. All of these aspects aim to ensure that educational staff can work effectively and efficiently in order to achieve educational goals, both for individuals, institutions, and society. In the context of this study, optimizing HR management is a key factor in improving the quality of learning in *Dayah*.³⁵

Daycares that have complete facilities are generally supported by a good management system so that they can increase the effectiveness of the learning process. In addition, the success of learning also depends heavily on the availability of sufficient, quality, and appropriate educational resources. In order for existing

³³ S E Raymond et al., *Manajemen Sumber Daya Manusia*, Selvi Kasm (CV Gita Lentera, 2023).

³⁴ Catherine Snyder et al., "The Placement Dilemma: Leveraging Technology to Improve the Student Teacher Placement Process Through Participatory Action Research," *Contemporary Issues in Technology and Teacher Education* 23, no. 1 (2023): 312-36.

³⁵ Siti Yumnah et al., "Strategi Kepala Sekolah Dalam Mengelola Sumber Daya Guru Untuk Meningkatkan Mutu Pendidikan," *Munaddhomah: Jurnal Manajemen Pendidikan Islam* 4, no. 1 (February 22, 2023): 92-104, <https://doi.org/10.31538/munaddhomah.v4i1.350>.

facilities to provide maximum benefits, their use must be optimized, both in supporting the role of teachers as educators and students as students. Therefore, the management of facilities and infrastructure has an important role in ensuring that educational facilities are maintained and can be used optimally in supporting teaching and learning activities. In relation to this study, effective management of facilities and infrastructure is one of the main factors in creating a conducive learning environment in *Dayah*. This study emphasizes that in addition to aspects of human resource management, the utilization of planned and sustainable educational facilities also plays an important role in improving the quality of education. With good management, both in terms of human resources and facilities, a more comfortable, effective learning environment that supports the academic development and character of students can be created.³⁶

Dayahs that have complete facilities are generally supported by a good management system, so that the learning process can run more optimally. In addition, the availability of sufficient, quality, and appropriate educational resources is an important factor in supporting the effectiveness of teaching and learning. The utilization of these facilities must be carried out optimally, both by teachers in carrying out their duties as educators and by students in supporting the learning process. Therefore, the management of facilities and infrastructure must be carried out systematically in order to provide optimal benefits for all members of the madrasah. In the context of this study, effective management of facilities and infrastructure is the main supporting factor in creating a conducive learning environment in *Dayah*. This study highlights the importance of integration between facility management and human resources in order to improve the quality of education. With a planned and sustainable management strategy, madrasahs can ensure that every available facility is used optimally and contributes directly to improving the quality of learning.³⁷

CONCLUSION

The management of facilities and infrastructure in many *Dayahs* still faces various challenges, such as budget constraints, lack of proper planning, and minimal attention to facility maintenance. This condition has a direct impact on the quality of learning that has not reached its maximum potential. On the other hand, HR management, which includes recruitment, training, and strategic placement of teachers, is an important element in utilizing existing facilities to support the learning process.

Competent and well-managed teachers are able to maximize the use of facilities and infrastructure, create a conducive learning environment, and increase student motivation and participation. The synergy between the management of facilities, infrastructure, and HR is the key to success in creating effective and quality learning in *Dayahs*. This study recommends strategic steps such as equalizing facilities, improving HR competency, and collaboration between the government, *Dayah* managers, and the community to overcome existing obstacles. Further research is expected to deepen the collaboration aspect, including exploring the influence of technology and innovation in improving the quality of education in

³⁶ Elizasri, Joni Putra, and Fadriati, "Manajemen Sarana Prasarana Dalam Meningkatkan Akreditasi Madrasah Ibtidaiyah Negeri 2 Kota Sawalunto," *Dirasah : Jurnal Studi Ilmu Dan Manajemen Pendidikan Islam* 7, no. 1 (February 8, 2024): 184-92, <https://doi.org/10.58401/dirasah.v7i1.1066>.

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