



## Improving the Quality of Early Childhood Education through Effective Facilities and Infrastructure Management

Irfan Mujahidin<sup>1\*</sup>, Rici Oktari<sup>2</sup>, Chairunnisa Jawas<sup>3</sup>, Desty Puspita Sari<sup>4</sup>, Viedy Dimas Aditya<sup>5</sup>

<sup>1</sup> STAI Publisistik Thawalib Jakarta, Indonesia; e-mail: [irfanmujahidin86@gmail.com](mailto:irfanmujahidin86@gmail.com)

<sup>2</sup> Sekolah Tinggi Ilmu Tarbiyah Al-Quraniyah Manna, Indonesia; e-mail: [ricioctari12@gmail.com](mailto:ricioctari12@gmail.com)

<sup>3</sup> STAI Publisistik Thawalib Jakarta, Indonesia; e-mail: [ichajawas93@gmail.com](mailto:ichajawas93@gmail.com)

<sup>4</sup> Sekolah Tinggi Ilmu Tarbiyah Al-Quraniyah Manna, Indonesia; e-mail: [destypuspitasari.spd@gmail.com](mailto:destypuspitasari.spd@gmail.com)

<sup>5</sup> STAI Thawalib Jakarta, Indonesia; [viedyaditya@gmail.com](mailto:viedyaditya@gmail.com)

\* Corresponding Author: [irfanmujahidin86@gmail.com](mailto:irfanmujahidin86@gmail.com)

**Abstract.** This study aims to describe the management of facilities and infrastructure in improving the quality of learning at TK Islam Terpadu Arrayah Sukabumi, encompassing planning, procurement, maintenance, and disposal. The research employed a qualitative approach using interviews, observations, and documentation. The results show that planning is conducted systematically and participatively; procurement is carried out based on priority needs and budget availability; maintenance is routinely performed by all school members to ensure the feasibility of facilities; and disposal is implemented according to the condition of the items and recorded in the Dapodik system. These four processes have been proven to support the creation of a safe, comfortable, and effective learning environment and contribute to the improvement of educational quality at TK Islam Terpadu Arrayah Sukabumi. Conclusion: Planned, participatory, and sustainable management of facilities and infrastructure supports high-quality learning, a safe environment, efficiency, accountability, and the overall enhancement of early childhood education quality.

**Keywords:** Early Childhood Education; Educational Quality; Facilities and Infrastructure; Learning Quality; Safe Learning Environment.

### 1. INTRODUCTION

Early Childhood Education (ECE) serves as a crucial foundation for child development, as an appropriate curriculum builds basic competencies, stimulates cognitive, social, and emotional aspects, and shapes character from an early age (Marjuki & Baidowi, 2023). Effective ECE management ensures the delivery of quality education, optimal developmental stimulation, and the comprehensive growth, early learning, and character formation of children (Jannah et al., 2024). Proper guidance supports emotional, social, and behavioral development, helping children build independence and readiness for the next educational stage (Nasution et al., 2023). Cognitive stimulation based on Piaget's theory guides teachers in designing learning activities aligned with developmental stages, thereby strengthening thinking skills and academic preparedness (Khotimah & Agustini, 2023). Early Islamic guidance shapes morals, values, and positive habits, reinforcing children's spiritual foundation (Rofiki et al., 2022). Well-managed institutions enhance service quality, making ECE a critical foundation for future learning success and character development (Baidowi & Widyaningsih, 2022).

Facilities and infrastructure play an essential role in supporting the learning process in ECE, as the quality of education heavily depends on the availability of adequate resources, which directly affects learning outcomes and holistic child development (Madyibi & Bayat, 2021; Balqis et al., 2023). A well-designed physical environment supports children's social, emotional, and cognitive development, enhancing engagement and interactions vital for early childhood education. A holistic approach involves educators, architects, and policymakers in creating an optimal learning environment (Slunjski, 2015). However, many ECE institutions

in remote or underprivileged areas face limitations in facilities, including shortages of health resources, learning materials, and safe environments, which hinder the quality of education services (Matjokana, 2023). Strategies to address these challenges include investment in physical, technological, and social facilities, provision of safe environments, sufficient learning materials, and access to water and sanitation (Mahajan & Rajagopal, 2024; Rad et al., 2022). Effective management and leadership also contribute to the maintenance of facilities, ensuring a conducive learning environment (Ya'cub & Ga'a, 2021).

Education is a vital component of national development, as it enhances human resource quality and reflects a nation's progress. Although guaranteed as a right for all citizens under the 1945 Constitution of the Republic of Indonesia, equitable access to education remains a challenge, particularly in remote areas. Law No. 20 of 2003 on the National Education System emphasizes that education aims to develop learners' potential through effective learning processes for the benefit of society, the nation, and the state. Facilities and infrastructure are critical factors in achieving this goal, as they support the quality of learning (Binsa, 2021). At TKIT Arrayah in Cikembar District, facilities such as comfortable classrooms, educational teaching aids, and playgrounds are adequate, although additional creative media and maintenance of play equipment are still needed. Facility shortcomings, particularly in less developed regions, can impede educational outcomes, necessitating greater government attention and more effective management.

Based on the condition of facilities and infrastructure that still require improvement at TK Islam Terpadu Arrayah Sukabumi, this study focuses on examining the management of facilities and infrastructure as an effort to enhance the quality of student learning. A research gap arises from the lack of literature describing in detail the processes of planning, procurement, maintenance, and disposal of facilities and infrastructure in early childhood education institutions in an integrated manner. The novelty of this study lies in its approach, linking facilities and infrastructure management with the improvement of learning quality, which has been scarcely explored in the context of Integrated Islamic Kindergarten. The study's impact is expected to be both theoretical, by enriching educational management studies and providing an effective facilities management model, and practical, by offering recommendations for schools, students, higher education institutions, and other researchers. The research objectives include describing all stages of facilities and infrastructure management to optimally support the quality of early childhood education.

## **2. RESEARCH METHODS**

This study employs a qualitative approach using a case study design to understand the management of facilities and infrastructure in improving learning quality. A qualitative approach is chosen because it allows the researcher to describe phenomena comprehensively and in-depth through an inductive process. The focus of the study is on the planning, procurement, maintenance, and disposal of facilities and infrastructure, as well as their impact on the quality of student learning. A case study is selected due to its emphasis on intensive observation of actual and unique phenomena in the institution under study. Data were collected through interviews, observations, and documentation. Interviews were conducted with relevant informants, such as the principal, teachers, operators, and students, using structured interviews

to ensure valid and reliable data. Observations were conducted by directly monitoring facility conditions and activities, while documentation included collecting archives, photographs, and activity notes to complement primary data. Data validity was maintained through tests of credibility, dependability, and confirmability. Credibility was ensured through method triangulation and source triangulation, comparing data from various methods and informants. Dependability was tested through audits by academic supervisors to ensure data consistency and stability. Data analysis employed qualitative descriptive methods, which included three stages: data condensation, filtering and summarizing key information; data presentation, presenting data narratively for easier comprehension; and conclusion drawing/verification, drawing conclusions based on findings and verifying their relevance to field data.

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

#### **Planning of Facilities and Infrastructure in Improving Learning Quality at TK Islam Terpadu Arrayah Sukabumi**

The planning of facilities and infrastructure in Early Childhood Education (ECE) plays a crucial role in creating a high-quality learning environment. Adequate infrastructure not only supports the learning process but also influences children's emotional, mental, psychological, academic, and social development (Madyibi & Bayat, 2021). Appropriate facilities and resources are essential for supporting holistic child development, particularly in marginalized communities, as a solid foundation of early knowledge becomes key to future educational success (Aina & Bipath, 2022). However, ECE infrastructure planning faces several challenges, including inadequate facilities such as unsuitable buildings and limited learning materials (Devanny Gumulya & Ryan Adiputra, 2020). Additionally, gaps between policy and practical implementation hinder the creation of an optimal ECE environment (Sitati et al., 2016). Therefore, proper planning and management of facilities and infrastructure are essential to support children's comprehensive development.

At TK Islam Terpadu Arrayah Sukabumi, the planning of facilities and infrastructure is carried out systematically and structurally to enhance learning quality. The process begins with a needs assessment involving all school stakeholders, including the principal, vice principal in charge of facilities and infrastructure, vice principal of curriculum, teachers, and administrative staff. This needs assessment is conducted through coordination meetings at the beginning of the academic year, before learning activities commence, with the goal of prioritizing needs based on the actual conditions in the field. This stage also considers aspects of safety, cost, utility, and alignment with the school environment. The results of the needs assessment form the basis for preparing the School Activity and Budget Plan, ensuring that every procurement of facilities and infrastructure is targeted and efficient. Meeting documentation is also used as evidence of planning implementation and as a reference for submission and reporting to the foundation or relevant education authorities, ensuring that the management of facilities and infrastructure is transparent and accountable.

The planning of facilities and infrastructure at TK Islam Terpadu Arrayah is structured across three timeframes: short-term, medium-term, and long-term, taking into account student and teacher needs, school environmental conditions, safety, and the long-term benefits of each facility procured. The primary funding sources include the School Operational Assistance Fund, registration fees/re-enrollment fees, and student tuition fees. Once needs are formulated,

proposals are submitted to the principal and foundation for approval. The next stage is procurement, which can only be carried out once funds are available, accompanied by complete documentation as proof of accountability. This planning approach ensures that each facility purchased is relevant to educational needs, supports teaching and learning activities, and prevents waste or budget misuse. Consequently, the planning process becomes a fundamental foundation for ensuring the effectiveness of facilities and infrastructure management within the school.

The involvement of all relevant parties in the planning of facilities and infrastructure is key to successful facility management at TK Islam Terpadu Arrayah Sukabumi. The principal leads coordination meetings with the vice principals, teachers, and administrative staff to discuss the needs of each classroom as well as general school requirements. Decisions are made participatively, transparently, and based on priority scales and available budgets. Furthermore, the planning process considers cost, safety, and the long-term utility of the facilities procured. The primary objective of this process is to ensure that facilities and infrastructure are appropriately utilized, efficient, and supportive of sustained educational quality. Through a systematic mechanism, thorough documentation, and effective coordination, the planning of facilities and infrastructure at TK Islam Terpadu Arrayah Sukabumi effectively enhances learning quality and ensures the optimal fulfillment of educational needs.

### **Procurement of Facilities and Infrastructure in Enhancing the Quality of Student Learning at Arrayah Integrated Islamic Kindergarten, Sukabumi**

The procurement of facilities and infrastructure in early childhood education plays a crucial role in creating optimal educational quality. Adequate infrastructure serves as the primary foundation for delivering high-quality learning services, as insufficient facilities can hinder the comprehensive development of children, including cognitive, social, and emotional aspects (Madyibi & Bayat, 2021). Learning resources, including age-appropriate play equipment and modern learning tools, contribute significantly to the holistic stimulation and development of children (Monanita Maran Eka et al., 2024). For the procurement of facilities and infrastructure to be effective, management principles such as planning, organizing, implementation, and supervision must be consistently applied. In addition, good coordination and communication among the foundation, administration, and school principal are key to improving the management quality of facilities, ensuring that children have a conducive, safe, and supportive learning environment that fosters character development and academic abilities from an early age (Soraya et al., 2024).

The procurement process of facilities and infrastructure at Arrayah Integrated Islamic Kindergarten, Sukabumi, is a crucial stage that follows prior planning. The purpose of procurement is to fulfill the needs of facilities that support classroom teaching and overall school operations. This process is carried out based on a pre-established plan, taking into account priority scales according to the school's needs to ensure that learning activities run optimally and effectively. Adequate facilities provide significant benefits in the smooth implementation of all educational activities and school programs. With appropriate and sufficient facilities, learning objectives can be achieved more easily and effectively, while teaching and learning processes become more efficient, structured, and enjoyable for students.

The parties involved in procurement include the principal, the vice principal in charge of facilities and infrastructure, and the foundation. The initial stage begins with deliberation to identify facility needs based on priority. Once the list of needs is prepared, a proposal is submitted to the foundation to obtain budget approval. If approved, the purchase of goods is carried out, followed by the distribution of facilities and infrastructure to each class according to their needs. Procurement is conducted directly through purchasing, covering physical facilities such as building repairs, fence painting, as well as educational play equipment, learning media, and supporting teaching materials. The purchase method is chosen because it is considered the most effective way to meet the school's needs accurately, efficiently, and according to plan.

The types of procurement carried out at Arrayah Integrated Islamic Kindergarten, Sukabumi, include physical facilities, educational play equipment, and learning media and materials. Examples of procurement that have been implemented include educational teaching aids such as puzzles, threading tools, various types of Lego, teacher desks for recitation activities, and locker cabinets for storing stationery, books, and student magazines. The procurement process is carried out systematically through deliberation, proposal submission, purchasing, and distribution according to the needs of each class. The involvement of all parties and structured implementation ensures that the procurement of facilities and infrastructure is effective, efficient, and purposeful. With these facilities fulfilled, the quality of learning improves, students can learn comfortably and enjoyably, and the educational goals at Arrayah Integrated Islamic Kindergarten, Sukabumi, can be optimally achieved.

### **Maintenance of Facilities and Infrastructure in Enhancing the Learning Quality of Students at TK Islam Terpadu Arrayah Sukabumi**

The maintenance of educational facilities and infrastructure is a crucial aspect in supporting the quality of learning services in schools. Effective maintenance management requires comprehensive planning, organizing, implementation, and supervision, including joint meetings and collaboration among all school members for inventory management and maintenance activities (Noven & Inayati, 2024). Funding presents a major challenge, as studies indicate that approximately 2–3% of the Asset Replacement Value (ARV) needs to be allocated for the long-term maintenance of school facilities (Herath et al., 2023). Various maintenance strategies are applied, ranging from preventive to reactive approaches; however, many schools still rely on reactive maintenance due to budget constraints (Mohammad & Tabassi, 2014). Proper facility maintenance positively impacts student academic performance, teacher effectiveness, and retention, making it a critical factor in achieving optimal educational outcomes (Beauregard & Ayer, 2017).

Maintenance of facilities and infrastructure at TK Islam Terpadu Arrayah Sukabumi is a significant effort to ensure that school facilities remain in good condition and are ready for use, thereby supporting the smooth teaching and learning process. Maintenance activities aim to preserve durability, safety, and comfort in using the facilities while preventing early damage that may hinder learning and incur additional repair or replacement costs. With routine maintenance, educational facilities can be used sustainably, efficiently, and optimally. This also enhances students' learning quality, as a well-maintained environment supports concentration, comfort, and effective learning interactions. Additionally, maintenance activities form part of a systematic school management strategy, ensuring that all school facilities function according

to educational objectives and support the comprehensive achievement of students' competencies.

The maintenance process involves all school stakeholders, including the principal, vice principal in charge of facilities and infrastructure, teachers, students, and cleaning staff. Their involvement aims to create collective responsibility in maintaining the facilities at optimal conditions. The maintenance stages begin with instilling a sense of responsibility among all school members, followed by routine monitoring, periodic inspections, and reporting of any damages discovered. The school also maintains a guideline book that contains schedules and maintenance procedures as a reference for implementation. Cleaning staff play a role in maintaining the cleanliness of the environment, classrooms, and facilities, as well as reporting minor damages. Students are also trained to maintain the cleanliness and order of the facilities they use, ensuring that all parties contribute to the smooth and safe utilization of school infrastructure.

The availability of various facilities that support learning and child development, including the role-play room on the second floor which promotes socio-emotional development, well-organized and comfortable Playgroup classrooms for early childhood, and a playground equipped with slides, swings, and seesaws for gross motor skill development, demonstrates the effectiveness of collective maintenance. All facilities appear clean, safe, and well-maintained, reflecting successful collective upkeep. Systematic maintenance through regular inspections, instilling responsibility, damage reporting, and adherence to maintenance guidelines ensures that facilities remain fully functional. Consequently, a comfortable, safe, and developmentally supportive learning environment is created, enhancing learning quality and the effectiveness of educational activities at TK Islam Terpadu Arrayah Sukabumi.

### **Disposal of Facilities and Infrastructure in Enhancing the Learning Quality of Students at TK Islam Terpadu Arrayah Sukabumi**

The disposal of facilities and infrastructure at TK Islam Terpadu Arrayah Sukabumi is a process of removing damaged or unusable items from the inventory list in accordance with applicable procedures. The primary objective of this activity is to prevent financial waste due to the maintenance or safeguarding of items that can no longer be utilized, while simultaneously reducing potential losses for the school. Disposal is an essential part of school asset management, as it maintains efficiency in the use of facilities and ensures the availability of safe and functional resources to support the learning process. Items that are still usable may be repaired, whereas those that are severely damaged or unsafe will be disposed of. Additionally, disposal considerations include limited storage space and the availability of replacement items, so that disposal decisions are made prudently and according to the school's actual needs.

The disposal process involves all school stakeholders, including the principal, vice principal in charge of facilities and infrastructure, teachers, and cleaning staff. The disposal stages begin with an assessment of item conditions to evaluate their usability and safety. Damaged, unusable, or unnecessary items are separated from those still functional. A formal disposal letter is then prepared as an official record, submitted by the vice principal in charge of facilities, and authorized by the principal. Cleaning staff contribute by reporting minor damages, while teachers assist in identifying items no longer needed. This collective approach

ensures that each stage of disposal follows proper procedures and reflects actual conditions on the ground, ensuring that school assets remain well-managed.

All disposed items are recorded in the Basic Education Data, for both outgoing and incoming items, ensuring that the inventory data is always up to date. This process is an essential aspect of accountability in school asset management, ensuring that all changes in the condition of facilities are officially documented. The documentation demonstrates that disposal activities are carried out systematically, from inspection, reporting, and preparation of disposal letters to official recording in the Basic Education Data system. Thus, the disposal process at TK Islam Terpadu Arrayah Sukabumi is conducted transparently and in a structured manner, maintaining safety, functionality, and efficient use of facilities, while supporting professional asset management and facilitating the teaching and learning process.

The disposal of learning facilities in schools has significant implications for educational outcomes. School closures in rural areas, as observed in certain regions of China, have been shown to reduce primary and secondary school graduation rates, particularly for girls and children from low-education families, thereby exacerbating gender and educational disparities (Hannum et al., 2021). These impacts are also reflected in local demographics, as school closures may trigger population decline in areas distant from economic centers, reinforcing regional disparities (Di Cataldo & Romani, 2024). Moreover, adequate educational facilities are crucial for maintaining health and hygiene standards, especially for adolescent girls, since poor sanitation facilities can increase absenteeism and health issues (Mchenga et al., 2020). To address financial constraints while improving access to quality education, public-private partnerships can offer a viable solution (Kumari, 2016).

#### **4. CONCLUSION**

The management of school facilities is conducted systematically, participatively, and based on actual needs to support educational quality. Planning of facilities and infrastructure is carried out through the preparation of the School Budget Plan, involving all school components, considering needs, environment, safety, and budget, with funding sourced, registration fees, and tuition, ensuring transparency, documentation, and procurement efficiency. Procurement of facilities is planned and prioritized through internal deliberations and foundation approval, with purchases made at the beginning of the academic year to create a comfortable learning environment that supports student development. Maintenance of facilities is comprehensive and continuous, involving all school members through routine inspections, damage reporting, and instilling responsibility, ensuring that facilities remain safe, clean, and well-maintained, reflecting effective collaboration. The disposal of facilities is also conducted systematically, beginning with inspection, reporting, feasibility evaluation, and official disposal approved by the principal, considering damage, safety, and availability of replacements, with all data recorded in the Basic Education Data system for accountability. As a recommendation, maintenance can be further enhanced through regular preventive maintenance with standardized documentation, and responsibility for facilities can be integrated into the curriculum or daily activities so that students develop habits of caring for school facilities from an early age.

## REFERENCES

- Aina, A. Y., & Bipath, K. (2022). Availability and use of infrastructural resources in promoting quality early childhood care and education in registered early childhood development centres. *South African Journal of Childhood Education*, 12(1), a980. <https://doi.org/10.4102/sajce.v12i1.980>
- Baidowi, A., & Aulia Widyaningsih, R. (2022). Pengelolaan pendidikan dalam meningkatkan mutu kelompok bermain Nur-Masithah Sampang Madura. *Al Tahdzib: Jurnal Pendidikan Islam Anak Usia Dini*, 1(1), 19–30. <https://doi.org/10.54150/altahdzib.v1i1.68>
- Balqis, A. A. A., Hariri, H., Rini, R., & Sowiyah. (2023). Preparation of educational facilities and infrastructure in improving the quality of education towards the society era 5.0. *AIP Conference Proceedings*, 2621(1), 080009. <https://doi.org/10.1063/5.0142582>
- Beauregard, M. A., & Ayer, S. K. (2017). Strategies for prioritizing operational expense at K-12 educational facilities. In *6th CSCE-CRC International Construction Specialty Conference 2017 - Held as Part of the Canadian Society for Civil Engineering Annual Conference and General Meeting 2017* (Vol. 2, pp. 1306–1314). Canadian Society for Civil Engineering.
- Binsa, U. H. (2021). Manajemen sarana prasarana pendidikan anak usia dini di TK Pelangi Anak Negeri Yogyakarta. *Children Advisory Research and Education Journal Care*, 8(2), 6.
- Devanny Gumulya, S. S. N., & Adiputra, R. S. S. N. (2020). Designing furniture as learning facilities for early young child education in Desa Gunung Sari, Tangerang. *IOP Conference Series: Earth and Environmental Science*, 452(1), 012063. <https://doi.org/10.1088/1755-1315/452/1/012063>
- Di Cataldo, M., & Romani, G. (2024). Rational cuts? The local impact of closing undersized schools. *Regional Science and Urban Economics*, 109, 104057. <https://doi.org/10.1016/j.regsciurbeco.2024.104057>
- Hannum, E., Liu, X., & Wang, F. (2021). Estimating the effects of educational system consolidation: The case of China's rural school closure initiative. *Economic Development and Cultural Change*, 70(1), 485–528. <https://doi.org/10.1086/711654>
- Herath, N., Duffield, C., & Zhang, L. (2023). Public-school infrastructure ageing and current challenges in maintenance. *Journal of Quality in Maintenance Engineering*, 29(2), 401–419. <https://doi.org/10.1108/JQME-06-2021-0043>

- Jannah, F., Hotimah, N., Maisuri, D. E., & Apriana, D. (2024). Peningkatan pengelolaan pendidikan anak usia dini melalui implementasi manajemen pendidikan. *Al Tahdzib: Jurnal Pendidikan Islam Anak Usia Dini*, 3(1), 17–26. <https://doi.org/10.54150/altahdzib.v3i1.244>
- Khotimah, K., & Agustini, A. (2023). Implementasi teori perkembangan kognitif Jean Piaget pada anak usia dini. *Al Tahdzib: Jurnal Pendidikan Islam Anak Usia Dini*, 2(1), 11–20. <https://doi.org/10.54150/altahdzib.v2i1.196>
- Kumari, J. (2016). Public-private partnerships in education: An analysis with special reference to Indian school education system. *International Journal of Educational Development*, 47, 47–53. <https://doi.org/10.1016/j.ijedudev.2015.11.017>
- Madyibi, S., & Bayat, A. (2021). A case study of early childhood development facility infrastructure in Philippi, South Africa. *Perspectives in Education*, 39(4), 156–171. <https://doi.org/10.18820/2519593X/PIE.V39.I4.2>
- Mahajan, V., & Rajagopal, K. (2024). Infrastructure development in education for building the knowledge foundation. In *Infrastructure Development Strategies for Empowerment and Inclusion* (pp. 22–37). IGI Global. <https://doi.org/10.4018/979-8-3693-2917-7.ch002>
- Marjuki, M., & Baidowi, A. (2023). Perencanaan kurikulum dalam meningkatkan mutu pendidikan anak usia dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(6), 7883–7892. <https://doi.org/10.31004/obsesi.v7i6.5742>
- Matjokana, T. N. M. (2023). Early childhood care and education policy intentions and the realities in rural areas. *Perspectives in Education*, 41(2), 258–274. <https://doi.org/10.38140/pie.v41i2.6741>
- Mchenga, J., Phuma-Ngaiyaye, E., & Kasulo, V. (2020). Do sanitation facilities in primary and secondary schools address menstrual hygiene needs? A study from Mzuzu City, Malawi. *Physics and Chemistry of the Earth*, 115, 102842. <https://doi.org/10.1016/j.pce.2020.102842>
- Mohammad, R. R., & Tabassi, A. A. (2014). Study on maintenance practices for school buildings in Terengganu and Kedah, Malaysia. *MATEC Web of Conferences*, 10, Article 03003. <https://doi.org/10.1051/mateconf/20141003003>
- Monanita Maran Eka, N. P. A., Vipriyanti, N. U., & Ketut Arnawa, I. (2024). Existence of facilities and infrastructure management for public junior high schools in Abiansemal District, Badung Regency. *AIP Conference Proceedings*, 2961(1), 030005. <https://doi.org/10.1063/5.0197233>

- Nasution, A. Z., Sembiring, J. Br., Hayati, R., & Nasution, F. (2023). Bimbingan konseling pada anak usia dini. *Al Tahdzib: Jurnal Pendidikan Islam Anak Usia Dini*, 2(2), 57–68. <https://doi.org/10.54150/altahdzib.v2i2.221>
- Noven, T. T. A., & Inayati, N. L. (2024). Proses manajemen sarana dan prasarana di Madrasah Aliyah Negeri. *Munaddhomah*, 5(1), 73–83. <https://doi.org/10.31538/munaddhomah.v5i1.570>
- Rad, D., Redeş, A., Roman, A., Ignat, S., Lile, R., Demeter, E., Egerău, A., Dughi, T., Balaş, E., Maier, R., Kiss, C., Torkos, H., & Rad, G. (2022). Pathways to inclusive and equitable quality early childhood education for achieving SDG4 goal—a scoping review. *Frontiers in Psychology*, 13, 955833. <https://doi.org/10.3389/fpsyg.2022.955833>
- Rofiki, R., Jannah, F., & Adawiyah, R. (2022). Bimbingan Islam pada pendidikan anak usia dini. *Al Tahdzib: Jurnal Pendidikan Islam Anak Usia Dini*, 1(2), 89–98. <https://doi.org/10.54150/altahdzib.v1i2.109>
- Sitati, E. M., Ndirangu, M., Kennedy, B., & Rapongo, G. S. (2016). Implementation of early childhood development education service standard guidelines on physical facilities in public and private early childhood education centres Kakamega County, Kenya. *Early Child Development and Care*, 186(11), 1765–1778. <https://doi.org/10.1080/03004430.2015.1131159>
- Slunjski, E. (2015). Multidisciplinary approach to designing space of early childhood education institutions as a condition for high-quality education process. *Croatian Journal of Education*, 17(1), 253–264. <https://doi.org/10.15516/cje.v17i0.1512>
- Soraya, E., Supadi, Arum, W. S. A., & Theoline, E. (2024). Management of facilities and infrastructure at Al-Azhar Islamic secondary high school 22 Sentra primer East Jakarta. *AIP Conference Proceedings*, 3116(1), 040034. <https://doi.org/10.1063/5.0214845>
- Undang-Undang Republik Indonesia No. 20 Tahun 2003 tentang Sistem Pendidikan Nasional.
- Ya'cub, M., & Ga'a, D. S. (2021). Strategi kepala sekolah dalam meningkatkan kualitas pembelajaran melalui pengembangan sarana prasarana. *Munaddhomah*, 2(2), 60–69. <https://doi.org/10.31538/munaddhomah.v2i2.67>