

IMPELEMENTATION OF EDUCATIONAL FACILITIES AND INFRASTRUCTURE TO SUPPORT TEACHER PROFESSIONALISM AND STUDENT LEARNING ACHIEVEMENT AT MTS BINA MADANI, BOGOR CITY

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Abstrak

This study analyzes the implementation of educational facilities and infrastructure in supporting teacher professionalism and student learning achievement at MTs Bina Madani, Bogor City, based on six variables of the Van Meter and Van Horn policy implementation model: policy standards and objectives, resources, inter-organizational communication, characteristics of implementing agencies, implementer disposition, and social, economic, and political conditions. This study employed a descriptive qualitative approach using observation, interviews, and documentation. The informants included the principal, teachers, facilities coordinator, and school supervisor. The findings indicate that the implementation of educational facilities and infrastructure is generally quite good. Standards and objectives have been implemented through procurement, utilization, maintenance, and evaluation activities. Human resources are generally capable of utilizing available facilities, although some teachers still require additional support in using educational technology. Limited financial resources require procurement and maintenance to be prioritized according to urgency. Communication and coordination are conducted through meetings, briefings, written guidelines, and digital communication media. Implementers demonstrate positive attitudes, discipline, commitment, and responsibility. A supportive social environment also contributes to implementation, although limited funding, land, facilities, and dependence on government assistance remain challenges. Overall, the implementation of educational facilities and infrastructure is sufficiently effective in supporting teacher professionalism and the learning process.

1. INTRODUCTION

Education is a strategic instrument in human resource development, and the quality of educational services is closely linked to a school's capacity to organize an effective, comfortable, and responsive learning environment to contemporary needs. In

Islamic education, this responsibility takes on an additional dimension, as schools and madrasas are expected to develop academic competence alongside moral and spiritual character. MTs Bina Madani, Bogor City, is one such Islamic secondary education institution that strives to improve the quality of education through the management and utilization of educational facilities and infrastructure.

Educational facilities and infrastructure are not merely physical complements to the learning process. They serve as strategic resources that support teachers in planning and implementing learning, students in accessing learning resources, and school leaders in organizing educational services. Facilities such as classrooms, libraries, computers, LCD projectors, internet access, and other learning media can provide more varied and meaningful learning experiences when systematically planned, provided, utilized, maintained, and evaluated. The thesis underlying this article emphasizes that inadequate or poorly managed facilities can stifle teacher creativity, reduce learning motivation, and limit the effectiveness of classroom activities.

This issue becomes even more important in the context of digital learning. Teachers are expected to use diverse learning technologies and media while continuing to demonstrate pedagogical, professional, social, and personal competencies. However, the availability of facilities alone does not automatically translate into professional practice. Teachers' capacity, motivation, and commitment to use and maintain facilities are equally important. Therefore, the implementation of educational facilities and infrastructure must be understood as an interaction between policy objectives, resources, implementing actors, communication, organizational arrangements, and the surrounding environment.

At MTs Bina Madani, facility management is linked to the madrasa's vision of providing quality educational services, achieving excellence, developing faith and character, and maintaining environmental awareness. Its mission explicitly includes enhancing teacher professionalism and providing educational facilities that meet student needs. Research findings indicate that the madrasa has established a relatively systematic process, from identifying needs and proposing budgets, procurement, utilization, to periodic evaluation and maintenance. However, its implementation still faces limitations, particularly in financial capacity, the number of technology-based facilities, and the condition of some facilities affected by continuous use.

These conditions make policy implementation theory relevant to analyzing the

phenomenon. This study applies the model of Donald S. Van Meter and Carl E. Van Horn, which explains implementation through six interrelated variables: standards and objectives, resources, inter-organizational communication and reinforcement activities, characteristics of implementing agencies, implementer dispositions, and social, economic, and political conditions. This model allows for examining not only the availability of facilities but also how school actors interpret objectives, mobilize resources, coordinate activities, and respond to constraints.

The first variable, standards and objectives, is important because implementation requires clear direction. In the case of MTs Bina Madani, the objectives are directed at supporting effective learning, teacher professionalism, and student achievement. These objectives are communicated through regular school meetings and coordination. The second variable, resources, encompasses human resources, facilities, finances, and time. Findings indicate that human resources are generally available, and most teachers can use computers, LCD projectors, and digital media. However, financial resources are still limited, requiring gradual procurement based on priorities.

The third variable, communication, is reflected in regular meetings, weekly briefings, written guidelines, in-person discussions, and digital communication groups. These channels allow information about facility needs, schedules, usage, maintenance, and evaluation to circulate among the principal, teachers, administrative staff, facilities team, and supervisors. The fourth variable, characteristics of the implementing agency, relates to the organizational structure, division of responsibilities, norms, oversight, and capacity of the actors responsible for implementation. At MTs Bina Madani, the principal acts as manager and supervisor, teachers serve as primary users of the facilities, and supervisors provide monitoring and recommendations.

The fifth variable is disposition, which refers to the attitude, acceptance, commitment, and motivation of implementers. Findings indicate that teachers generally exhibit positive attitudes and a willingness to use and maintain facilities. The sixth variable relates to social, economic, and political conditions. A supportive internal social environment and a conducive school climate strengthen implementation, while financial constraints and dependence on government support are significant constraints. The school's small organizational scale and direct communication among staff also provide compensatory benefits.

Based on this context, this article aims to describe and analyze how educational

facilities and infrastructure are implemented at MTs Bina Madani in Bogor City, and how this implementation supports teacher professionalism and student achievement. This analysis is expected to provide an empirical overview of policy implementation at the school level while highlighting practical strategies for managing limited educational resources in the context of Islamic madrasas.

2. RESEARCH METHODOLOGY

This study uses a qualitative approach with a descriptive design. This approach was chosen because the research aims to understand the processes, experiences, perceptions, and practices related to the implementation of educational facilities and infrastructure in their natural school contexts. Rather than measuring the effects of facilities through statistical testing, this study examines how management policies and processes are understood and practiced by the actors involved.

The research was conducted at MTs Bina Madani in Bogor City. Primary data were obtained through interviews and direct observation, while secondary data were obtained from school documents. Informants included the madrasah principal, teachers, facilities coordinators, and school supervisors. The research also considered supporting information regarding the madrasah profile, work programs, budget documents, inventory, supervision documents, maintenance records, and student achievement.

Data collection used three techniques: observation, interviews, and documentation. Observations focused on the physical condition of the facilities, their use during learning, and interactions between teachers and students when learning media were used. Semi-structured interviews were conducted to explore policy objectives, resource availability, utilization, maintenance, communication, implementing roles, attitudes, and environmental conditions. Documentation was used to verify and supplement the information obtained from observations and interviews.

Data analysis followed qualitative procedures including data reduction, data presentation, and conclusion drawing. Findings were organized according to the six Van Meter and Van Horn variables. Triangulation between interview information, observations, and documents was used to strengthen the credibility of the findings. Therefore, the analysis connected the empirical conditions at MTs Bina Madani with the theoretical dimensions of policy implementation without separating facility management from the professional role of teachers and student learning experiences.

3. RESEARCH FINDINGS AND DISCUSSION

1. Policy Standards and Objectives

The findings indicate that MTs Bina Madani has relatively clear standards and objectives for educational facilities and infrastructure. These objectives relate to effective learning, improving teacher professionalism, and student achievement. The school translates these objectives into planning, procurement, utilization, maintenance, and evaluation activities. The vision and mission also explicitly link facility provision to teacher professional development and quality educational services.

The implementation process begins with needs identification. Schools consider which facilities need to be added, repaired, or maintained and then prioritize them based on their urgency for learning. The facilities team supports inventory, monitoring, maintenance, and reporting. Evaluations are conducted periodically through inventory checks and facility usage reports. Supervisors also monitor facilities through visits, document reviews, and direct observation.

While implementation is generally consistent with stated objectives, gaps remain between ideal standards and actual capacity. Some facilities require repairs due to age and continued use, while financial constraints prevent all needs from being met simultaneously. Therefore, clarity of objectives is a strength, but achieving them still depends on the availability and sustainability of resources.

2. Resources: Human Resources, Facilities, and Budget

Human resources are a crucial strength. The thesis lists 14 teachers, most of whom have at least a bachelor's degree, and some have pursued higher education. Most teachers are proficient in using computers, LCD projectors, and digital learning media. The Madrasah also provides training and mentoring, especially for teachers who need assistance with technology-based learning. This demonstrates that the facilities are accompanied by efforts to strengthen the competencies of those who use them.

Physical facilities are adequate to support regular learning, including classrooms, library resources, computers, LCD projectors, internet access, and a computer skills room. However, the availability of some facilities is limited. For example, one computer lab must serve multiple study groups, and shared equipment requires scheduling. These limitations can sometimes impact the flexibility of learning activities.

Financial resources are the most visible constraint. Budgeting is regulated through the school's work plan and budget, applying the principle of prioritization. Routine

maintenance is funded where possible, while major repairs and new procurement are implemented gradually. Findings indicate that this strategy is relatively effective in maintaining continuity, but it does not eliminate the structural limitations of a budget that is smaller than the madrasah's ideal needs.

The three dimensions of resources are interdependent. Limited funding affects the quantity and quality of facilities; the availability of facilities affects teachers' space for innovation; and teacher competence determines how effectively existing facilities are used. Therefore, implementation is not only supported by the quantity of resources, but also by the school's ability to prioritize, coordinate, and use them efficiently.

3. Characteristics of Implementing Institutions and Teacher Professionalism

The implementation structure at MTs Bina Madani is relatively clear. The principal serves as manager, administrator, and supervisor; teachers are the primary users of facilities for classroom learning; the facilities team handles inventory, maintenance, and monitoring; and the school supervisor provides external oversight and recommendations. This division of roles facilitates accountability and reduces ambiguity in implementation.

Teacher professionalism is reflected not only in formal qualifications but also in their ability to plan lessons, select appropriate media, utilize available technology, and take responsibility for facilities. Findings indicate that teachers generally have positive motivation and are willing to adapt to new learning media. They also demonstrate an awareness that facilities need to be protected and maintained for long-term use.

At the same time, there is a technological competency gap among some teachers, particularly in the use of newer digital tools. Therefore, training and mentoring remain necessary. Evidence suggests that the implementation of facilities can support professionalism when teachers have access to equipment and opportunities to improve their competency in using it.

4. Communication and Coordination in Supporting Student Achievement

Communication is conducted through several complementary channels: regular meetings, weekly briefings, written guidelines or standard procedures, live discussions, and digital communication groups. These channels allow schools to disseminate information about facility needs, usage schedules, responsibilities, maintenance, and evaluations. Because madrasahs have a relatively compact organizational structure, direct communication can occur quickly and with broad participation.

Coordination is supported by the facilities team and monitored by the school supervisor. Teachers can communicate their needs and constraints, while the principal coordinates priorities and decisions. Communication also helps prevent conflicts in the use of shared facilities, especially computer labs and LCD projectors. When schedules and responsibilities are understood, facilities can be used more consistently during learning.

The thesis shows that the relationship between communication and student achievement is indirect but significant. Effective coordination supports continuity of learning, prevents avoidable disruptions, and enables teachers to use instructional media more effectively. The madrasah's vision and mission emphasize quality learning and achievement, making communication about facilities part of a broader quality improvement mechanism rather than simply an administrative activity.

Student numbers also provide relevant context. The thesis records 125 students in 2023/2024, 118 in 2024/2025, and 102 in 2025/2026, with the average number per learning group remaining around 20. These relatively manageable class sizes may provide teachers with more opportunities to attend to students while utilizing available facilities, provided scheduling and coordination of shared resources are maintained.

5. Implementer's Attitude

Implementer attitudes were one of the strongest supporting factors identified in the study. Teachers generally accepted school policies regarding facility use and maintenance and demonstrated a commitment to utilizing available resources to make learning more active and engaging. They also demonstrated a willingness to learn and adapt to technological developments.

Positive attitudes are evident in teachers' responsibility for facility maintenance. Teachers understand that they are not only users but also agents who help preserve resources. The principal and facilities team also demonstrate commitment through prioritization, monitoring, maintenance, and training. These findings support Van Meter and Van Horn's proposition that a policy is more likely to be implemented effectively when implementers understand, accept, and are committed to its objectives.

However, a positive attitude cannot completely replace structural limitations. Motivation and commitment can maintain the use of existing resources, but they cannot completely replace the need for an adequate budget, sufficient equipment, and timely maintenance. Therefore, the implementer's attitude should be treated as a supporting factor that works in conjunction with the organization's resources and capacity.

6. Social, Economic, and Political Conditions

The social environment at MTs Bina Madani is generally conducive. A shared understanding of the school's goals, open communication, and positive relationships between the principal, teachers, and supervisors create social capital that supports implementation. The school environment is also quite conducive to learning and the use of available facilities.

Economic conditions are more challenging. Madrasahs rely heavily on available school funding, including support from the School Operational Assistance Program (BOS) and government assistance, while the need for facility development continues. Limited budgets require schools to prioritize urgent procurement and maintenance. This thesis also identifies limited land and building capacity, including a land area of approximately 540 m², as obstacles to developing additional facilities.

External policy conditions are also important. National standards and government policies provide regulatory guidelines for facility management and the use of technology in education. Government support can therefore strengthen implementation, but reliance on external assistance poses sustainability risks if schools do not diversify their support base.

Overall, social and environmental conditions serve as compensating forces, while economic constraints represent the primary vulnerability. Madrasahs are able to maintain relatively good implementation because internal social capital, positive attitudes among administrators, and effective communication partially offset resource limitations. However, long-term sustainability requires stronger financial planning, diverse support, systematic maintenance, and ongoing teacher competency development.

Table 1. Summary of Implementation Findings

Variables	Key Findings	Main Obstacles
Standards and objectives	The objectives are clear and translated into planning, procurement, utilization, maintenance, and evaluation.	Ideal standards do not always correspond to available resources.
Resource	Human resources and facilities are adequate; teachers generally use digital media.	Limited budget, technological facilities, and some equipment is old.
Implementing agency	The roles of the principal, teachers, facilities team, and supervisors are relatively clear.	Technological competency is not evenly distributed among teachers.

Communication	Regular meetings, briefings, written guidelines, and digital groups support coordination.	Time constraints and technical communication issues may occur.
Attitude	Teachers demonstrate positive attitudes, commitment, discipline, and responsibility.	Positive commitment cannot replace inadequate facilities or funding.
Social/economic/political	A conducive school climate and external support help sustain implementation.	Financial dependency and limited land/building capacity impact sustainability.

The findings above indicate that implementation at MTs Bina Madani is relatively effective but not yet fully optimal. The strongest dimensions are clarity of objectives, positive attitudes of implementers, and communication. The most significant limitations relate to financial resources, the number and condition of facilities, and uneven technological competency. This pattern suggests that educational facility policies at the madrasah are maintained through adaptive management: prioritization, coordination, gradual maintenance, teacher initiative, and external support.

4. CONCLUSION

The implementation of educational facilities and infrastructure at MTs Bina Madani in Bogor City can be categorized as quite good. The school has established relatively clear standards and objectives and translated them into programs for identifying needs, budgeting, procurement, utilization, maintenance, and evaluation. This implementation supports the school's efforts to improve the quality of learning, teacher professionalism, and student achievement.

Human resources are generally able to utilize available learning facilities, and teachers demonstrate positive attitudes, motivation, responsibility, and commitment. Communication and coordination between the principal, teachers, facilities team, administrative staff, and supervisors occurs through regular meetings, weekly briefings, written guidelines, and digital communication. These mechanisms help coordinate the use of shared facilities and maintain continuity of learning.

The primary challenge is economic. Budget constraints, dependence on government assistance, limited technology-based facilities, aging equipment, and limited land and building capacity limit the madrasah's ability to meet all ideal needs simultaneously. However, the school responds through priority-based budgeting, phased maintenance, training, monitoring, and optimization of existing facilities. A conducive social environment and positive disposition of the implementers serve as important compensating factors.

The study concluded that successful implementation is not solely determined by the availability of facilities. Success depends on the interaction between clear objectives, adequate and efficiently managed resources, competent implementing agencies, effective communication, positive attitudes, and a supportive environment. For sustainability, MTs Bina Madani must strengthen systematic maintenance, improve technology training, document facility monitoring, transparently schedule shared facilities, and diversify sources of support for educational infrastructure.

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