

Strategic Program Management of Research-Based Madrasahs in Cultivating a Research-Oriented Learning Culture

Alfia Ainun Nikmah¹, Muhammad Imaduddin², Masturin³, Ashif Az Zafi⁴

¹Universitas Islam Negeri Sunan Kudus

²Universitas Negeri Surabaya

^{3&4} Universitas Islam Negeri Sunan Kudus

 Alfiaainun71@gmail.com

Article Information:

Received 2025-04-12

Revised 2025-06-02

Published 2025-06-27

DOI:

<https://10.35719/jieman.v7i1.282>

Keywords: Strategic Program Management, Research-Based Madrasah, Research Culture Development

ABSTRACT

The importance of an educational institution to innovate education in developing the quality of education amidst the needs of society through research programs. The research method used in this study is a qualitative approach with study. Data collection through access to the organization. observation, interview, and documentation. Testing the validity of data are triangulation. The data validation analysis techniques use in this research are data collection, data reduction, data presentation, and conclusions. Based on the research result, it may be concluded that (1) Research madrasah plan in developing the research culture, are regulation of determine the purposes for research programs, designing resources, strength and barriers analysis and creating research program, and analyzes the advantages and disadvantages. (2) The research madrasah organization in developing the research culture, especially, establishment, design the team jobdesk. (3) The implementation of the research madrasah program in developing research culture. Consisted of socialization of the research program, the research course, which used the PJBL model, research tutoring, research supercamps, outing class, research training and MANSAKU Research science and social week (MSW). Those activities are reflected as the character of observed behavioral regularities. (4) The research madrasah supervision in developing research culture are consisted of determine of work standard, performance assessment and irregularities improvements formed in a creation.

INTRODUCTION

Education has a central role in facing the challenges of the 21st century characterized by rapid global change, rapid technological development, and increasing social complexity (Hidayati, 2019). Theoretically, education should be able to produce a generation that is adaptive, critical, innovative, and has 21st century skills such as critical, collaborative, and creative thinking (Kefin Setyawan dkk., 2024). However, in practice, many educational institutions - especially madrasahs - have not yet demonstrated these qualities. Teachers' lack of classroom management skills, traditional learning methods, and high workload are the main obstacles in improving learning quality (Clark & Shin, 2024). Teachers need to find innovative learning programs because traditional teaching makes students passive and unable to create knowledge, which decreases students' understanding, ability to think critically, creatively, and innovatively (Firmadani, F, 2017). On the other hand, policies such as the

How to cite: Nikmah, A. A., Imaduddin, M., Masturin, & Az Zafi, A. (2025). Strategic program management of research-based madrasahs in cultivating a research-oriented learning culture. *JIEMAN: Journal of Islamic Educational Management*, 7(1), 1-15. <https://10.35719/jieman.v7i1.282>



Copyright: 2024 © by authors

This work is licensed under a [Attribution-ShareAlike 4.0 International \(CC BY-SA 4.0\)](https://creativecommons.org/licenses/by-sa/4.0/).

Madrasah Research Program have been launched since 2013 as a form of effort to build a research culture in madrasah. But until now, its implementation is still not optimal (Abidin, A. Z, 2022). There is a gap between the ideal theory of 21st century education and the social reality faced by madrasahs in building a strong research culture. The question is: how can madrasahs effectively manage their research programs to encourage a strong and impactful research culture?

A number of previous studies have revealed various problems in the implementation of madrasah research programs. (Rusydi Ananda & Amiruddin, 2017) showed that madrasahs still face obstacles such as the lack of research facilities, the unavailability of competent research supervisors, and limited access to literature. In addition, (Thoyib, 2021) suggested that the low implementation of this program is due to weak management in managing research activities. (Narbarte, M. P & Balila J. S, 2018) also emphasized the importance of mentoring, writing, and publishing research results in shaping a healthy research culture. These studies mostly highlight technical aspects or implementation barriers, but not many have reviewed in depth how the management of the research madrasah program can play a strategic role in building a sustainable and impactful research culture (Rony, R, 2021; Fitriana, 2024). This is where the position of this research lies: It seeks to fill the gap by focusing on program management as the main variable.

This study aims to answer an important question: How can research program management in madrasahs develop a research culture in the madrasah environment? This question is crucial to answer because it concerns a deep understanding of the managerial role in forming a healthy and productive research ecosystem in religious-based educational units. Madrasahs, as Islamic educational institutions that have great potential in scientific contributions, often face challenges in building a sustainable research tradition. Therefore, this study highlights managerial strategies that can be implemented, such as research program planning, teacher capacity building, resource allocation, and strengthening academic networks. By identifying key factors in research program management, this study is expected to contribute to the development of a contextual, quality-oriented, and Islamic value-based research culture that is the foundation of madrasahs.

As a tentative answer to this question, this study argues that madrasah research program management that is structured, goal-oriented, and based on the principles of organizational effectiveness and efficiency, is able to develop a strong research culture in madrasah. This approach is based on Hasibuan's view that management is the art and science of managing organizational resources to achieve optimal goals. With proper management, madrasahs will be able to create a research system that is not only administrative, but also transformative-involving teachers, students, and the school community in a culture of scientific and innovative thinking. Therefore, research program management is a key variable in realizing madrasah as an institution that is adaptive to the challenges of the times and contributes to the development of science.

RESEARCH METHODS

This research applies a qualitative method with a case study approach. The object of research is MAN 1 Kudus. Data collection techniques consist of: access to the organization, direct observation, in-depth interviews, and documentation (Creswell W. John, 2013). Primary

data were collected through direct interviews with the head of the madrasah, deputy curriculum, research coordinator, research teachers, and research students. The interviewees were selected using purposive sampling, where they were selected based on their considerations and research objectives. Secondary data was collected from several documents, guidebooks, government regulations, and so on. The data was then tested with various types of triangulation (Sugiyono, 2015). The final process of analyzing data is collecting data, sorting data, and presenting it in a narrative to draw conclusions. (Miles, M.B, Huberman, A.M, & Saldana, J, 2014).

RESULTS AND DISCUSSION

Result

1. Planning the Research Madrasah Program in Telling the Story of Research Culture at MAN 1 Kudus

The initial stage that needs to be done in creating an education program is planning. This is because planning is a crucial element in achieving goals and how to achieve them (Nizamuddin Silmi dkk., 2024). George Terry explains that planning is the basis of goals and actions pursued in achieving them. In other words, planning is a process. Planning involves a series of steps to set goals, strategies for achievement, allocation of human resources, time, and cost estimates. Therefore, the planning stage must be carefully determined before implementation takes place.

According to Baharudin, planning for the development of Islamic education can be done as follows. (1) Analysis of relevant policies, (2) Analyzing the conditions of the institution, (3) formulating goals (4) Collecting data, (5) Data analysis (6) Determining the steps of implementation activities (Baharuddin & Moh Makin, 2010). Meanwhile, in planning according to Handoko, there are management steps that need to be taken, namely (1) setting goals (2) formulating resource conditions, (3) identifying SWOT, (4) developing plans (Arifudin dkk., 2021). The planning process carried out by MAN 1 Kudus is as follows:

a. Policy Analysis.

Baharudin said that before creating a flagship program, MAN 1 Kudus first adjusted to government policies, especially PMA Number 90 of 2013 which encourages madrasahs to have programs according to the needs and potential of students. Because it did not yet have a flagship program, MAN 1 Kudus began to design a research program, also referring to the 2019 Decree of the Director General of Pendis which made research one of the flagship programs. The research program was chosen for several reasons: to equip students with 21st century skills such as critical thinking, to support their interest in research, to attract the interest of the community because it is considered to improve school quality, and to encourage academic achievement through student work. So, this research program is not just following the rules, but also a real step to improve the quality of learning at MAN 1 Kudus.

b. Determining the Objectives of the Research Madrasah Program

Determining the objectives of the Madrasah research program, because every educational system has been designed needs to be monitored in every step to ensure the implementation of the program runs effectively and efficiently. In general, the purpose of the madrasah research program at MAN 1 Kudus is to develop students'

scientific attitudes so that they are able to behave and act based on scientific processes which are reflected in the characteristics of systematic, rational, realistic, objective, honest, courageous, open, tolerant, creative, and critical thinking. The objectives of the research madrasah program have been adjusted to the vision of MAN 1 Kudus, namely the objectives of the research madrasah program are in line with the vision of MAN 1 Kudus, namely “The formation of an Islamic, Superior, and Skilled Generation in Science and Technology”, which is expected to be able to form a generation skilled in the fields of science and science and technology (Naqibul Arif, 2024). The research madrasah program is part of the long-term efforts of MAN 1 Kudus's institutional goals. This is also in line with the mission of MAN 1 Kudus where students are expected to become students who excel and excel and are skilled, innovative, competitive in developing technological knowledge in responding to the times.

c. Resource Availability

The third step in the planning of the Madrasah Riset program at MAN 1 Kudus involves determining and mobilizing key resources. First and foremost is the recruitment of qualified research teachers. As emphasized by (Priyatna, 2017), human resources are a central component in achieving organizational goals. At MAN 1 Kudus, research teachers are selected based on their research competencies, experience, and achievements in research competitions (Naqibul Arif, 2024; Astuti dkk., 2023) equipping teachers with research skills not only enhances their professional capacity but also fosters a culture of academic innovation. Second, student selection is focused on high-achieving learners from designated superior classes. These students receive specialized instruction to develop their research potential, aligning with the goal of improving educational quality and producing superior academic outputs (Y. M. Putra, 2018). Third, the research curriculum is designed to be progressive. Following Hamalik's curriculum planning model, MAN 1 Kudus introduces research methodology in grade X and deepens research focus in grade XI, aiming for students to produce competitive research outputs (M. Umar, 2024; Sulthoniyah, 2024)). The curriculum spans science, technology, engineering, social sciences, religion, and humanities, and is implemented through Project-Based Learning (PJBL), a model known to foster critical thinking and creativity (Wardoyo, 2023). Evaluation includes research reports, prototypes, presentations, and participation in the Mansaku Science Week. Fourth, infrastructure such as classrooms, laboratories (biology, chemistry, robotics), and digital tools support the research environment. Despite some limitations, such as an incomplete social studies lab and robotics equipment, the facilities generally support the program's goals. Fifth, the school has established partnerships with universities including UMK, IAIN Kudus, and UNDIP. These collaborations enhance mentoring, research supervision, and innovation development. Lastly, funding is secured through contributions from parents and state budget allocations (DIPA), which are essential for covering research-related costs, including participation in national and international competitions (Hidayati, 2019; Naqibul Arif, 2024). In summary, the resource planning at MAN 1 Kudus encompasses qualified personnel, selective student recruitment, a structured curriculum, adequate infrastructure, strategic partnerships,

and sustainable funding—all of which are integral to supporting a robust research-based educational model.

d. Analyze strengths and obstacles

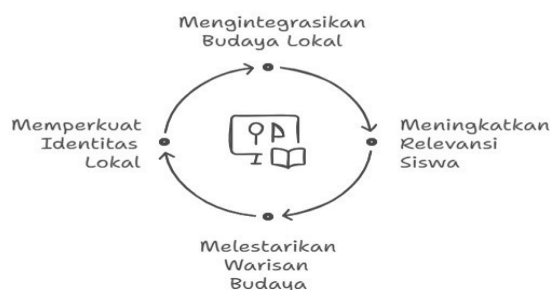
To analyze the strengths and obstacles of the research program, MAN 1 Kudus uses the SWOT approach. In terms of strengths, this madrasah has competent research teachers, talented students, and has become a reference madrasah because it consistently achieves achievements so that many other institutions come to learn. However, this program still has weaknesses such as limited funds and the number of research teachers. In terms of opportunities, MAN 1 Kudus has great potential to continue to achieve achievements at the national and international levels because of the experience and research culture that has been formed. Meanwhile, the threat is the increasingly tight competition with other madrasahs that are also starting to develop research programs seriously.

e. Research Program Preparation

The organizational culture at MAN 1 Kudus is rooted in the institution's vision and mission, which serve as the foundation for developing its research program as part of the madrasah's advancement goals. The formation of this culture involves the leadership and research team in designing structured activities, including daily programs such as research subjects and mentoring sessions, semester-based events like the Mansaku Science and Social Week (MSW), and annual activities such as the Research Supercamp, research training, and outing classes. The research program is also divided into two service tracks: the *Science and Innovation Program (SIP)* and the *Social Humaniora Intensive Program (SHIP)*, tailored to suit students' interests and potential (Jejen Musfah, 2015). The necessary steps in the planning stage of the Madrasah Research Program to develop a research culture can be described as follows:

Figure 1

Siklus Pendidikan yang Diresapi Budaya



2. Organizing the Research Madrasah Program in Developing a Research Culture

Organizing is a process of compiling and arranging tasks, responsibilities, and authority in a job to make it more structured and effective (Suhadi Winoto, 2020). Organization is important for dividing tasks and organizing human resources so that goals are achieved efficiently. Managers use this process to bring all activities and resources together in a coordinated manner. According to Arifin and Hadi W., there are three main things to consider: strategizing based on plans, organizing workflows systematically, and

dividing tasks according to their respective expertise ([Muchamad, Machsun, 2022](#)). The organization of the research program at MAN 1 Kudus is as follows.

First, the formation of a research team and its organizational structure. The team consists of teachers who are competent in the field of research. The team structure includes the head of the madrasah, the head of curriculum, the research coordinator, and the research teachers. Secondly, the team develops research programs and activities, which include research learning (daily), Mansaku Science and Social Week/MSW (per semester), as well as supercamp, research training, and outing class (annual). Tasks are adjusted to their respective fields and the committee structure. Third, the division of tasks based on field of expertise. The team is divided into two programs: Science and Innovation Program (SIP) and Social Humanities Intensive Program (SHIP). M. Umar was appointed as the coordinator. Each teacher is assigned according to their field, both in teaching and mentoring research work, including accompanying students in competitions.

3. Implementation of the Research Madrasah Program in Developing Research Culture

Implementation is an action or action to realize or realize a predetermined planning and organizing function. The implementation of the research madrasah program at MAN 1 Kudus is as follows.

a. Socialization of Research Programs

According to Robbins, one of the efforts to strengthen the role and maintain culture is socialization ([Farihanto, 2015](#)). Socialization is a process of conveying messages to individuals or groups with the aim of communicating certain attitudes, views, and actions, either through direct interaction or through intermediaries. The purpose of the socialization of organizational culture is to form the commitment and creativity of members and introduce organizational culture. Robbins said that the socialization of organizational culture must go through three steps ([Farihanto, 2015](#)).

The first step is pre-arrival, which is the initial socialization process before students officially join, where research programs are introduced through social media. The second step is the meeting, which is carried out through socialization activities for students and guardians of class X students on September 7, 2024 in the "Parenting and Socialization of Work Programs" event. Furthermore, the third step is metamorphosis, which is the process of students' self-adjustment to the culture and research rules at MAN 1 Kudus, such as participating in daily research learning and Research Supercamps activities at the beginning of the year.

b. Research as a Subject

Referring to the Decree of the Director General of Pendidikan No. 6989 of 2019, research must be taught intracurricular through local content subjects (mulok). At MAN 1 Kudus, research learning is carried out according to the local curriculum rules, which are two hours of lessons every day except Fridays.

Research learning at MAN 1 Kudus uses the Project based Learning (PjBL) model. This learning system puts students active in solving problems faced using projects ([Sigit Mangun Wardoyo, 2023](#)). The first step in this learning is to determine the project, the teacher prepares the project points, determines the project for one

semester. The project in the first semester is the preparation of a research proposal while the project in the second semester is a research work and research report (Vita Sri Pujiati, 2024). Teachers form research groups, then seek information about the competition and teach the basics of research through observation and literature study. After that, students start designing research projects in the form of proposals and undergo regular mentorship. The project is then researched according to the appropriate method (qualitative, quantitative, or R&D), and the results are presented through a power point, poster, or paper at Mansaku Science & Social Week every semester. Throughout the process, students learn from a variety of sources such as journals, books, and theses, which help improve creative thinking skills and other skills such as scientific communication and self-confidence. Research learning carried out every day shows that MAN 1 Kudus does make research a major part of the learning culture.

c. Research Guidance

Research guidance is provided during and outside of class hours. Students submit the title of a scientific paper to be selected before the competition. Those who pass will receive intensive guidance to be ready to represent madrasahs in various competitions

d. Research Supercamp

Research Supercamp is an intensive early-year training for research students. The goal is to equip them with basic research skills and build motivation to excel. This activity is also an initial strategy to produce excellent and competitive students in the field of research, in line with McClelland's theory of the importance of motivation to excel (Sobry Sutikno, 2012). To train the ability to create android-based applications, the training emphasizes practice through demonstration methods. According to Mangkunegara, the demonstration method is a learning process by demonstrating to show students how to do something in order to clarify the material (Tholibin, 2022). In the implementation, students jointly created an android-based application exemplified by the presenter (Ulfa et al., 2017).

Figure 2.1

Implementation of Research Madrasah Program



In addition to these activities, Research Supercamp is also a forum for the night of familiarity with fellow research students. On the second day of this training, all students can present the results of research from the training in front of all participants and supervisors (Annaura Tufahati, 2024). This is a step in improving the works and controlling

in conducting research. This is because research that is in accordance with the nearest event competition can be registered immediately.

1) Research Training

Research Training at MAN 1 Kudus aims to develop and hone mastery of scientific writing in preparing for competitions at the national level. This implementation is adjusted to the needs and trends of research that are developing today. This training was held on October 5, 2024 which presented Dr. Muhammad Miftahul Falah, M.Pd., M.Si., from the Semarang Religious Education and Training Center (BDK). This training teaches several skills, namely, first, how to quickly write Artificial Intelligence (AI)-Assisted Scientific Paper Proposals (Khalifa & Albadawy, 2024). Second, Augmented Reality (AR). Augmented Reality is the integration of the real world and the virtual world in the form of 3D model animation, text or video that can be felt virtually (Hariawan dkk., 2020). Augmented Reality training can be used as one of the research ideas. one of them can use the CCTE (Change, Controversy, Trend, and Emergency) strategy in developing innovations in various fields, including education (Ali et al., 2022). Third, Virtual Reality. Virtual Reality (VR) is a computer technology that is able to recreate various environments, both real and fictitious, while mimicking the physical sensations of users to produce an immersive interactive experience. In general, this technology can simulate certain circumstances, so that it can provide a new experience in learning (Yewande et al., 2020). In this training, it is not only in the form of lectures, but also hands-on practice of making Virtual Reality (VR) and Augmented Reality (AR) technology using the Assembler AR application and related educational sites. This training uses the CCTE (Change, Controversy, Trend, Emergency) strategy to develop AR-based research ideas. The main goal is to help participants hone their research skills, discover new ideas, and produce innovations that are relevant to the times. This activity is a real step to increase the capacity of students as researchers, because without adequate skills, research is difficult to develop.

2) Outing Class Riset

Outing classes are research learning processes that are carried out outdoors. Through outing classes, students gain knowledge and experience new nuances and can interact directly with the community and the surrounding environment (Maryanti dkk., 2019). Outing class is one of the efforts to bring students closer to real life in the community. Research outing class that aims to invite students to get to know the potential of the surroundings that can be used as research material (Vita Sri Pujiati, 2024). Research outing class activities at MAN 1 Kudus are carried out once a year, one of which is themed Coffee Education in Edukopi Village, Dawe. Students learn directly the coffee process from planting to marketing. This learning uses a real-life experience-based Contextual Teaching and Learning model to increase learning motivation. This outing class has been proven to help students develop intellectual skills, thinking strategies, motor skills, and active learning behaviors. (Handayani & Bahri, 2024).

3) *Mansaku Science and Sosial Week (MSW)*

Mansaku Science and Social Week (MSW) at MAN 1 Kudus is part of a research program that aims to explore the potential of students in preparing impactful proposals

and projects, as well as training scientific thinking, confidence, and introducing research to the community. This activity must be followed every semester, with class X students preparing proposals and class XI making research reports. The assessment includes proposals, presentations, posters, and research products, with aspects such as neatness of writing, presentation ability, and poster design quality. Evaluations are carried out twice a year and have an effect on graduation or grade promotion. MSW is also an open exhibition to share works, foster scientific culture, and expand students' horizons on knowledge and social issues.

4. Supervision of Research Madrasah Programs in Building Research Culture

Supervision is the activity of observing, monitoring through various methods to find out how far the implementation is and the number of irregularities that occur (Ibrahim dkk., 2021). That way, supervision is implemented comprehensively starting from before, during, to after the activity (Kamaludin et al., 2022). This aims to ensure that the management elements run effectively and efficiently. Supervision of research programs at MAN 1 Kudus is carried out directly and indirectly. Directly means that the leader directly supervises the performance of his subordinates. This was done by the head of the madrasah and the head of the curriculum by visiting the location of the research activity. Indirect supervision is also carried out once a semester with research teams with the head of the madrasah. Indirect supervision is supervision that uses the results of reports submitted from members to the leadership.

The supervision steps according to Kadarman consist of first, setting program quality standards. Program quality standards in this context determine the standards that can be determined from the objectives of the research program (Djadjuli, 2013). The purpose of this research program is to develop a scientific mindset and action in students. Various observed behaviors of MAN 1 Kudus students are implemented in various research activities ranging from research learning, supercamps, outing classes, research competition guidance and Mansaku Science and Social Week are considered successful in building a research culture among students.

According to Tadjudin, the assessment standard can also be determined from the timing. The standard time in supervision in question is the time limit needed to provide services or produce works. The time standard in the completion of scientific papers has been where students must prepare a proposal (Ishaq & Kumar, 2023). Every semester, MAN 1 Kudus students are required to compile scientific papers or journals. The quality standards include the ability to find ideas, collect and analyze data, and write according to scientific principles. Behaviorally, both students and teachers are required to think scientifically, apply research methods, and be active in research competitions.

Second, evaluation of the performance of the implementers is carried out to ensure that the program runs well. Research teachers are considered quite active, even guiding outside of school hours. The research coordinator is also considered to be able to manage the team and activities well. Students also showed high enthusiasm through their activeness in guidance and competitions. The performance of the program can also be seen from collaborations with universities and other agencies. As a result, MAN 1 Kudus students have achieved various prestigious achievements, such as 2nd place in LKIR BRIN 2022,

runners-up at MYRES 2022, to international champions such as GYSTB in Hong Kong and IFEST2. All these achievements show that research culture not only shapes academic habits, but also encourages the birth of a culture of achievement.

Third, correcting deviations, namely correcting all forms of deviations that should not occur (Rollenhagen et al., 2017). Reporting on the supervision of research programs at MAN 1 Kudus is carried out every semester to evaluate obstacles. The main problem that arises is student saturation, overcome through varied learning methods such as outing classes and outbound. Other obstacles such as limited facilities are overcome by the submission of new facilities and cooperation, for example with Diponegoro University. To improve achievements, the results of students' research were modified so that they could be included in the competition, including the opportunity for a golden ticket to college. Supervision is carried out by setting work standards, evaluating the performance of the implementers (which are considered quite good), and solving obstacles through creative strategies such as Observe, Imitate, and Modify techniques.

Discussion

The research findings show that the planning process of the Research Madrasah program at MAN 1 Kudus is carried out systematically through the stages of policy analysis, goal setting, provision of resources, to the preparation of programs and curriculum. This is consistent with the concept of planning according to George R. Terry (Nizamuddin Silmi dkk., 2024), which states that planning is the basis for setting goals and achieving them. In addition, this approach is also in line with the principles of educational strategic planning according, which emphasize the importance of compatibility between educational goals and the vision and mission of educational institutions.

The findings also support the system theory in education management, where educational institutions are seen as a system consisting of inputs (human resources and policies), processes (program planning and implementation), and outputs (research culture and academic achievement). In other words, MAN 1 Kudus has implemented planning that is systemic and contextual to local and national needs.

The planning process that begins with policy analysis shows that MAN 1 Kudus has responded adaptively to regulations such as PMA No. 90 of 2013 and the Decree of the Director General of Education No. 6989 of 2019. This shows that planning is not merely administrative, but a strategic effort to align the madrasah's vision with the direction of national policies in developing a research culture. This adaptive attitude is in line idea of the importance of schools being responsive to national policies and global demands through program innovation, and reflects that successful schools in education reform are those that are able to contextualize policies in real implementation.

In terms of human resources, the finding that research teachers at MAN 1 Kudus are selected based on research competencies and experience shows the importance of selective and professional recruitment. This is in line with (Priyatna, 2017 and Astuti dkk., 2023) who emphasize that the quality of research teachers plays an important role in creating an academic culture. Moreover, MAN 1 Kudus's approach is in line with the idea of professional learning communities, where teachers are not only curriculum implementers but also agents of change and researchers in their classrooms. The availability of infrastructure and strategic

partnerships with universities are also important indicators. This is in line with the collaborative model in education according where meaningful learning occurs through social interaction and support from external partners.

The structure of the research curriculum, which is divided into an introduction to methodology in grade X and a deepening of concentration in grade XI, reflects a gradual approach (scaffolding). The project-based learning (PJBL) model applied shows the application of constructivism principles in education, as proposed, where student-centered learning through real projects can improve critical thinking skills, collaboration, and creativity. Evaluation of the program through student presentations, posters, and scientific papers indicates the application of authentic assessment, which is considered more reflective of true competence than traditional tests.

The finding that MAN 1 Kudus makes research as the core culture of the institution reflects efforts to form an academic-based organizational culture. This is in accordance with Robbins' view (Farihanto, 2015) that a strong organizational culture is formed through socialization, participation, and internalization of values. The three phases of socialization (pre-arrival, encounter, and metamorphosis) implemented are in accordance with Robbins. model, and can increase students' commitment to research culture. Programs such as Research Supercamp, AI, AR, and VR training confirm that madrasahs not only create a research culture, but also lead to digital literacy and 21st century educational innovation. This reinforces McClelland's theory of the need for achievement (nAch) in increasing students' intrinsic motivation (Sobry Sutikno, 2012).

The use of the SWOT approach shows that the madrasah has conducted a thorough analysis of the internal and external environment. Strengths such as competent teachers and an established research culture, as well as opportunities for national achievements, indicate the strategic position of the madrasah. However, challenges such as limited teachers and funding indicate the need for strategies to increase human resource capacity and diversify funding. This planning model is in line with the strategic planning approach in education management proposed, in which educational institutions need to develop strategies based on situation analysis and their superior potential.

Tabel 1

Key Aspect	Summary of Findings
Planning Model	Systematic and strategic, aligning with George R. Terry and Orstein & Hunkins' planning concepts; reflects systemic educational management and contextual relevance.
Policy Adaptation	Responsive to PMA No. 90/2013 & Dirjen Pendis Decree No. 6989/2019; planning as a strategic, not just administrative, response
Human Resources	Selective recruitment of research-competent teachers; supports professional learning communities.
Infrastructure Partners	Adequate labs and tools; strategic collaborations with universities; supports Vygotsky's social learning theory.
Curriculum Design	Gradual (scaffolded) model: Methodology in Grade X, specialization in Grade XI; uses PJBL aligned with constructivism

Key Aspect	Summary of Findings
Assessment Methods	Authentic assessments (presentations, posters, papers) reflect real competencies
Institutional Culture	Research as core culture; reflects Robbins' organizational culture model; supported by socialization phases and digital innovation programs (AI, AR, VR).
Motivation	Programs build student intrinsic motivation; aligns with McClelland's nAch theory.
SWOT Analysis	Strengths: teacher quality, research culture. Opportunities: national-level recognition. Weaknesses: limited teachers, funding. Strategy needed to enhance capacity.

CONCLUSIONS

This study shows that the management of research madrasah programs in developing research culture is carried out through four main stages: planning, organizing, implementing, and supervising. Planning is based on the analysis of student needs and government policies, while implementation is carried out through various innovative programs such as Research Supercamp, Outing Class, and Mansaku Science and Social Week. As a result, students showed improved research skills and achievements at various levels of competition.

Scientifically, this research enriches the study of education management by highlighting the importance of the governance of research programs in madrasahs. This research also renews the perspective on how research culture can be shaped through planned and consistent management.

However, this study was limited to one location and did not accommodate the diversity of the gender, age, and background of the students. Therefore, follow-up studies with broader approaches and quantitative methods such as surveys, are needed, in order to produce more comprehensive data and support more targeted policy-making.

ACKNOWLEDGMENT

The author would like to express sincere gratitude to all parties who have supported the completion of this article. Special thanks go to the leadership and research program coordinators of MAN 1 Kudus, whose openness and cooperation have provided valuable insights into the implementation of research-based learning. Appreciation is also extended to the students and teachers who have shared their experiences, allowing the researcher to better understand the development of a research culture within the madrasah. Lastly, I would like to extend my heartfelt thanks to my academic mentors and fellow researchers for their constructive input and encouragement throughout the writing process. This article would not have been possible without the contributions and support from all of you.

REFERENCES

- Abidin, A. Z. (2022). *Manajemen Sumberdaya Manusia*. Insight Mediatama. <https://repository.insightmediatama.co.id/books/article/view/18>
- Ali, N. A., Sadiq, M. H., Albabawat, A. A., & Salah, R. M. (2022). Methods and Applications of Augmented Reality in Education: A Review. *2022 International Conference on Computer Science and Software Engineering (CSASE)*, 175–181. <https://doi.org/10.1109/CSASE51777.2022.9759807>
- Arifudin, Moh., Sholeha, F. Z., & Umami, L. F. (2021). Planning (Perencanaan) Dalam Manajemen Pendidikan Islam. *MA'ALIM: Jurnal Pendidikan Islam*, 2(02). <https://doi.org/10.21154/maalim.v2i2.3720>
- Astuti, A. F., Maulani, A. F., Anggraeni, D., & Fajriah, E. L. (2023). Pentingnya Membangun Budaya Meneliti di Kalangan Guru. *Jurnal Kreativitas Mahasiswa*, 1(3). <https://doi.org/10.55338/jpkmn.v5i2.3017>
- Baharuddin, & Moh Makin. (2010). *Manajemen Pendidikan Islam: Tranformasi Menuju Sekolah/Madrasah Unggul*. UIN-Maliki Press. <https://books.google.co.id/books?id=op9EvwEACAAJ>
- Brown, B., Gude, W. T., Blakeman, T., van der Veer, S. N., Ivers, N., Francis, J. J., Lorencatto, F., Presseau, J., Peek, N., & Daker-White, G. (2019). Clinical Performance Feedback Intervention Theory (CP-FIT): a new theory for designing, implementing, and evaluating feedback in health care based on a systematic review and meta-synthesis of qualitative research. *Implementation Science*, 14(1), 40. <https://doi.org/10.1186/s13012-019-0883-5>
- Clark, N., & Shin, S. (2024). *Designing a Novice Teacher Training Program for Project-Based Learning*. *International Journal of Designs for Learning*, 15(3), 79–93. <https://doi.org/10.14434/ijdl.v15i3.37108>
- Creswell W. John. (2013). *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Pustaka Pelajar. https://www.researchgate.net/publication/384449211_research_design_pendekatan_kualitatif_dan_kuantitatif
- Farihanto, M. N. (2015). Sosialisasi Budaya Organisasi di Pondok Pesantren Muhammadiyah: Studi Kasus Sosialisasi Budaya Organisasi di Pendidikan Ulama Tarjih Muhammadiyah. *CHANNEL Jurnal Komunikasi*, 3(2). <https://doi.org/10.12928/channel.v3i2.3280>
- Firmadani, F. (2017). Pembelajaran Berbasis Riset Sebagai Inovasi Pembelajaran. In *Seminar Nasional Teknologi Pembelajaran dan Pendidikan Dasar*, 262–268. <https://doi.org/10.29303/abdiinsani.viii4.2096>
- Fitriana, H., Subiyantoro, Silviana, N. C., & Kareng, M. (2024). Trends And Strategic Issues In Developing Teacher Professionalism In The Era Of Digital Transformation. *JlEMAN: Journal of Islamic Educational Management*, 6(2), 167–179. <https://doi.org/10.35719/jieman.v6i2.224>
- Handayani, K., & Bahri, S. (2024). Contextual Based Learning Strategy Outing Class in Increasing Student Motivation to Realize Freedom of Learning. *Jurnal Pendidikan Sosiologi dan Humaniora*, 15(1), 357. <https://doi.org/10.26418/j-psh.v15i1.62461>

- Hariawan, A., Hermawan, H., & Waluyo, R. (2020). Pelatihan Augmented Reality (AR) Untuk Meningkatkan Keterampilan Guru. *Madani : Indonesian Journal of Civil Society*, 2(1), 47–52. <https://doi.org/10.35970/madani.v2i1.107>
- Hidayati, U. (2019). Inovasi Madrasah Melalui Penyelenggaraan Madrasah Riset. *EDUKASI: Jurnal Penelitian Pendidikan Agama dan Keagamaan*, 17(3). <https://doi.org/10.32729/edukasi.v17i3.636>
- Ibrahim, A. E., Pratiwi, R. I., & Nadjib, A. (2021). Fungsi Pengawasan dalam Meningkatkan Kedisiplinan Guru di MTs Hasyim Asy'ari Bangsri Sukodono. *Jurnal Administrasi Pendidikan Islam*, 3(1), 83–98. <https://doi.org/10.15642/japi.2021.3.1.83-98>.
- Ishaq, B. M., & Kumar, C. H. (2023). Crafting a Convincing Research Proposal: A Guide to Writing Successful Funding Applications. *Journal of Pharmaceutical Research*, 23(1), 8–20. <https://doi.org/10.18579/jopcr/v22.1.22.MS230301>
- Jejen Musfah. (2015). Manajemen Pendidikan (Teori Kebijakan dan Praktik). Kencana.
- Kamaludin, Widodo, J., Handoyo, E., & Masyhar, A. (2022). *Informal Guidance Academic Supervision in Integrated Learning Improvement*. <https://doi.org/10.2991/assehr.k.211125.103>
- Kefin Setyawan, Febby Rahmatullah, & R.A Retno Hastijanti. (2024). Penerapan Prinsip Sekolah Masa Depan pada Perancangan Sekolah Menengah Kejuruan: Future School Design Concept Challenges on Vocational School Design. *SARGA: Journal of Architecture and Urbanism*, 18(1), 84–92. <https://doi.org/10.56444/sarga.v18i1.1092>
- Khalifa, M., & Albadawy, M. (2024). Using artificial intelligence in academic writing and research: An essential productivity tool. *Computer Methods and Programs in Biomedicine Update*, 5, 100145. <https://doi.org/10.1016/j.cmpbup.2024.100145>
- Maryanti, S., Kurniah, N., & Yulidesni, Y. (2019). Meningkatkan Kecerdasan Naturalis Anak Melalui Metode Pembelajaran Outing Class Pada Kelompok B TK Asyiyah X Kota Bengkulu. *Jurnal Ilmiah Potensia*, 4(1), 22–31. <https://doi.org/10.33369/jip.4.1.22-31>.
- Miles, M.B, Huberman, A.M, & Saldana, J. (2014). *Qualitative Data Analysis, A Methods Sourcebook*. Sage Publications. <https://books.google.co.id/books?id=powxbaaaqbaj&printsec=frontcover&hl=id#v=onepage&q&f=false>
- Muchamad, Machsun. (2022). *Strategi Kepala Madrasah dalam Mengembangkan Program Gerakan Literasi Madrasah di Madrasah Tsanawiyah Negeri (MTsN) 7 Kediri* [Disertasi]. IAIN Kediri. https://repository.uin-alauddin.ac.id/23567/1/buku_%20dasar%20ilmu%20pendidikan.pdf
- Muhammad Thoyib. (2021). *Manajemen Madrasah Riset: Kajian Teoritis Dan Implementatif Menuju Madrasah Unggul Dan Inovatif Di Indonesia*. <https://repository.iainponorogo.ac.id/734/>
- Narbarte, M. P, & Balila J. S. (2018). Research Involvement, Motivation, And University Initiatives As Agents For Enhancing Research Culture And Quality. *Human Behavior, Olvido Development and Society*, 17, 68–78. <https://publication.k-pin.org/index.php/jpu/article/view/426>
- Nizamuddin Silmi, Bambang Kurniawan, & Muhamad Subhan. (2024). Perencanaan Dalam Ilmu Pengantar Manajemen. *Journal Of Student Research*, 2(1), 106–120. <https://doi.org/10.55606/jsr.v2i1.1899>

- Peraturan Menteri Agama (PMA) Nomor 90 Tahun 2013. (2013). *Tentang Penyelenggaraan Pendidikan Madrasah*.
- Priyatna, M. (2017). Manajemen Pengembangan SDM Pada Lembaga Pendidikan Islam. *Edukasi Islami: Jurnal Pendidikan Islam*, 5(09), 21. <https://doi.org/10.30868/ei.v5i09.87>
- Rony, R. (2021). Urgensi Manajemen Budaya Organisasi Sekolah Terhadap Pembentukan Karakter Peserta Didik. *Tafkir: Interdisciplinary Journal of Islamic Education*, 2(1), 98–121. <https://doi.org/10.31538/tijie.v2i1.26>
- Rollenhagen, C., Alm, H., & Karlsson, K.-H. (2017). Experience feedback from in-depth event investigations: How to find and implement efficient remedial actions. *Safety Science*, 99, 71–79. <https://doi.org/10.1016/j.ssci.2016.12.003>
- Rusydi Ananda, & Amiruddin. (2017). Inovasi Pendidikan: Melejitkan Potensi Teknologi Dan Inovasi Pendidikan. <http://repository.uinsu.ac.id/14072/>
- Sigit Mangun Wardoyo. (2023). *Pembelajaran Berbasis Riset*. Akademia Permata. https://www.researchgate.net/publication/385526313_pembelajaran_berbasis_riset_Research_Based_Learning
- Sobry Sutikno. (2012). *Manajemen Pendidikan Langkah Praktis Mewujudkan Lembaga Pendidikan Yang Unggul (Tinjauan Umum dan Islami)*. Holistica. <https://lib.atim.ac.id/opac/detail-opac?id=12246>
- Stahmer, A. C, Aranbarri, A, Drahota, A, & Rieth, S. (2017). Toward a more collaborative research culture: Extending translational science from research to community and back again. *Autism*, 21(3), 259–261. <https://doi.org/10.1177/1362361317692950>
- Suhadi Winoto. (2020). *Dasar-Dasar Manajemen Pendidikan*. <https://digilib.uinkhas.ac.id/697/1/editor%20buku%20ochotib%20dasar%20dasar%20manajemen%20pendidikan.pdf>
- Sugiyono. (2015). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta, <https://inlislite.uin-suska.ac.id/opac/detail-opac?id=20670>
- Sulthoniyah, L., Husnan, R., & Hidayat, R. (2024). Strategies for building the character of tolerant students through the management of ethnic diversity at the Salafiyah Syafi'iyah Situbondo Islamic boarding school. *Jurnal Pendidikan Islam*, 13(2), 267–276. <https://doi.org/10.30868/ei.v13i02.5739>
- Syahril, R. F., Saragih, S., & Heleni, S. (2021). Development Of Mathematics Learning Instrument Using Problem Based Learning Model On The Subject Sequence And Series For Senior High School Grade XI. *Jurnal Prinsip Pendidikan Matematika*, 3(1), 9–17. <https://doi.org/10.33578/prinsip.v3i1.62>
- Tholibin. (2022). Penerapan Metode Demonstrasi Untuk Meningkatkan Hasil Belajar Pendidikan Agama Islam Pada Siswa Kelas X Di SMK Zainul Falah. *Journal Research & Learning in Primary Education*, 4(1). <https://doi.org/10.31004/jpdk.v4i1.3679>
- Ulfa, A. M., Sugiyarto, K. H., & Ikhsan, J. (2017). *The effect of the use of android-based application in learning together to improve students' academic performance*. 050008. <https://doi.org/10.1063/1.4983910>
- Y. M. Putra. (2018). *Sistem Pengambilan Keputusan*. Modul Kuliah Sistem Informasi Manajemen. https://www.researchgate.net/publication/339947348_sistem_informasi_manajemen

- Yewande, M. A., Oluwatoyin, C. A., & Oluwafemi, A. S. (2020). Virtual Reality as a tool for learning: The past, present and the prospect. *Journal of Applied Learning & Teaching*, 3(2). <https://doi.org/10.37074/jalt.2020.3.2.10>
- Zafi, A. A., Maula, M., Tsurroya, A., Ameylia, L., Sari, N., & Jauhari, A. (2024). Manajemen Pembentukan Budaya Riset (Research Culture) Pada Siswa Madrasah Aliyah Negeri 2 Kudus. *Piwulang: Jurnal Pendidikan Agama Islam*, 6(2). <https://doi.org/10.32478/2dgcbn05>