

Research Article

Implementation of Internal Quality Assurance System in Improving the Quality of Education

Nurmarito Rambe*, Amiruddin Siahaan, Inom Nasution

nurmarito0332233013@uinsu.ac.id, amiruddinsiahaan@uinsu.ac.id, inomnasution@uinsu.ac.id

Master of Islamic Education Management, Universitas Islam Negeri Sumatera Utara, Medan, Indonesia, 20371

*Corresponding Author: nurmarito0332233013@uinsu.ac.id | Phone: +62877875564537

ABSTRACT

This research aimed to analyze the implementation of the Internal Quality Assurance System (SPMI) in improving the quality of education at MAN 2 Model Medan. Using a qualitative approach and semi-structured interviews, data were collected from five participants consisting of the principal, vice principal, quality assurance team leader, teaching staff, and administrative personnel. The data were analyzed using thematic analysis and critical discourse analysis to explore the participants' experiences in planning, implementing, and evaluating the quality system based on the Operational Curriculum of Madrasah (KOM). The findings revealed that SPMI was implemented through the PPEPP cycle (Planning, Implementation, Evaluation, Control, and Improvement) with KOM serving as the core instrument. The curriculum was developed contextually and collaboratively, forming the foundation for a strong quality culture. The educational output included improved academic and non-academic achievements as well as enhanced administrative order. The outcomes involved institutional transformation, strengthened governance, teacher professionalism, and increased public trust. A sustainable quality culture grew through the active participation of all stakeholders and a well-documented work system. This study concludes that SPMI at MAN 2 Model Medan has become an adaptive, collaborative, and transformative management system in advancing educational quality.

Keywords: SPMI, Madrasah Operational Curriculum (KOM), education quality, PPEPP, quality culture

1. INTRODUCTION

Self-efficacy is judgement of a person to his abilities to plan and implement the action to reach certain goals (Mukhid, 2009). In an academic context, self-efficacy reflects how confident students are in performing specific tasks (Perez & Ye, 2013). Self-efficacy plays a role in academic motivation and learning motivation (especially students' ability to manage their learning activities), and resistance to learning (Zimmerman, 2000). Self-efficacy has three dimensions that are magnitude, the level of task difficulty a person believes she can attain; strength, the conviction regarding magnitude as strong or weak; and generality, the degree to which the expectation is generalized across situations (Lunenburg, 2011). The magnitude dimension refers to the difficulty level of the task that a person believes he or she can accomplish. That is, the students' self-confidence toward their abilities in accomplishing various tasks at different levels of difficulty. The strength dimension refers to the resilience and persistence of students in accomplishing various tasks. Meanwhile, the generality dimension refers to students' beliefs about their abilities in accomplishing certain tasks as well as on a broader range of activities and situations.

Around the world, education has a strategic role in improving the quality of superior and competitive human resources in the era of globalization (Tilaar, 2019). To ensure sustainable quality of education, every educational institution needs to implement a structured and systematic quality assurance system. In the context of improving the quality of an educational institution, the main concern is how to ensure the quality of education, if the madrasah changes as a result of its implementation, and how effective the change is in producing the progress of the educational institution. (Jamil, n.d.) Quality assurance is a general term used as another word for all forms of monitoring, evaluation, or quality assessment activities. While quality or quality is the overall description and characteristics of goods or services that show their ability to satisfy expected or implied needs. The quality of education is comprehensive, involving all components, implementers and educational activities. Quality contains three elements, namely conformity with standards, conformity with stakeholder expectations, and fulfillment of promises given.

Increasing global competitiveness requires Islamic educational institutions to implement an internal quality assurance system (SPMI) effectively. However, the implementation of SPMI in many madrasahs still faces serious obstacles: limited understanding of SPMI, lack of facilities and infrastructure, and resistance to change (Meirani et al., 2022; Sudirman

Wilian et al., 2020). These obstacles hinder the strengthening of a culture of quality and the quality of sustainable education. So it can be said that a quality school/madrasah is a school/madrasah that can satisfy its customers, both internal and external customers. To achieve good quality, in the implementation of education, we must recognize who the customers are. By recognizing customers, education providers can determine the quality to be achieved so as to meet the satisfaction of parents (customers). Research shows that to improve learning effectiveness, the performance of educators, and the academic achievement of students. With this cycle, madrasahs can systematically identify weaknesses in the learning process and find the right solutions for improvement. that SPMI is very important for the success of educational change Improving the quality of education is the main focus to prepare students to face the world's challenges by meeting the quality standards set by the ministry of religion can improve students' academic and non-academic achievement. (Risal & Hasbi, 2023)

Research on the Internal Quality Assurance System (SPMI) at Madrasah Aliyah began to develop after the Indonesian government issued a policy related to education quality assurance. One of the important policies is the Regulation of the Minister of National Education (Permendiknas) No. 63 of 2009 concerning the Education Quality Assurance System (SPMP), with a focus on quality being an integral part of the national education system. The purpose of SPMP is to improve the quality of education to create a smart nation according to the ideals of the 1945 Constitution, with the main target of achieving or exceeding the National Education Standards. (Sunaiah et al., 2024). To ensure sustainable quality of education, every educational institution needs to implement a structured and systematic quality assurance system. (Ninda & Abdullah, 2022) One of the systems that has been implemented in various educational units in Indonesia, including madrasahs, is the Internal Quality Assurance System (SPMI) which aims to maintain and improve educational quality standards. (Khotimah et al., 2023). The Internal Quality Assurance System is the main need of every person, every institution and even every country, so that the slogan *Quality is everybody business*, where efforts to obtain and improve quality are everyone's main agenda. Quality is one of the challenges for business and educational institutions because they are faced with the problem of how to manage a quality in the face of global competition. Sallis said that quality has two aspects, namely adjusting to specifications and meeting customer needs. (Batubara & Arifin, 2022). Internal quality is a quality standard set and implemented by an organization to achieve its goals. Internal quality includes aspects such as the teaching and learning process, management, and resources. Internal quality is a quality benchmark formulated and implemented by an organization (in this context, an educational institution) to ensure the achievement of the goals that have been set.

The SPMI literature review is a system oriented to the quality assurance cycle that includes five stages, namely determining, implementing, evaluating, controlling, and improving educational quality standards. (Octaviani et al., 2024) Therefore, the effectiveness of SPMI implementation greatly determines the success of madrasahs in achieving the expected educational quality standards. (Mega, 2024) However, in the implementation of SPMI there are still various obstacles that need to be overcome, including the limitation of human resources who have a deep understanding of the concept of SPMI, the limitation of learning support facilities and infrastructure, and resistance to changes in the madrasah environment. (Meirani et al., 2022) In the study (Hadith & Nurhayati, 2010) stated that the low quality of education can be caused by the low quality of teaching by teachers, the low quality of graduates, the low motivation of students in learning, the lack of certified professional teachers in an educational institution, inadequate educational facilities, the methods and approaches used are not appropriate and up-to-date, the use of inappropriate educational evaluation methods, the implementation of education management is not optimal, or even inadequate education costs. (Nurfatimah et al., 2022).

International research shows that the success of SPMI is highly dependent on resource support, visionary leadership, and stakeholder involvement, including the community and parents (Hasanah et al., 2025; Hartinah & Rofahima, 2024). In madrasahs, the characteristics of pesantren-based institutions and religious norms add to the complexity of SPMI implementation (Istikomah et al., 2023). Although the policy of Permendiknas No. 63/2009 has strengthened the SPMI framework, several studies have found that its implementation tends to be a formality as an accreditation requirement (Supriatna, 2019; Amrizal, 2024). Stakeholders with minimal commitment result in quality not being maintained in real terms.

The implementation of the researcher using the theory of Deming popularized the management cycle which is a reference in quality assurance activities, namely *Plan, Do, Check, Action* (PDCA). This stage begins from *Plan* or make a plan, *Do* or activities to carry out plans, *Check* or evaluation activities of all activities that have been carried out, and *Action* or follow-up. (Daniel, 2004) Planning/*Plan*, It is an activity that includes setting standards, especially related to educator/teacher performance standards, learning experiences, and student learning outcome standards. Next *Do* Implementation of the educational process (learning process) in accordance with performance standards so that students can achieve the learning experience and expected results. *Check* or Evaluation is an effort to compare the implementation of the process with the set standards, whether it is appropriate or there are shortcomings that will be followed up in *Stuart T* namely further improvement based on the results of the evaluation (Alindi et al., 2025). To improve the quality of education in schools, (Sudarwan Danim, 2008) emphasizes that if an institution wants to improve the quality of its education, it must involve at least five dominant factors, namely:

Principal's Leadership where the principal must have and understand the work vision clearly, be able and willing to work hard, have a high work drive, be diligent and steadfast in working, provide optimal service, and have strong work discipline. Maximum teacher involvement, by increasing the competence and work profession of teachers in seminars, workshops and training activities so that the results of these activities are applied in schools. The approach that must be taken is children as the center so that students' competencies and abilities can be explored so that schools can give the strength that exists to students. The existence of a consistent, dynamic, and integrated curriculum can enable and facilitate the expected quality standards so that goals can be achieved optimally. The cooperation network is not only limited to the school environment and the community alone (parents and the community) but also with other organizations, such as companies or government agencies so that the output of the school can be absorbed into the world of work.

The need for empirical studies that explore SPMI in madrasahs, not just public schools. Lack of exploration of the relationship between SPMI practices and real improvements in the quality of education. Lack of data on practical strategies that have successfully overcome SPMI obstacles in the context of Islamic education as occurred in MAN 2 Model Medan, a madrasah with A accreditation. These obstacles can hinder the optimization of system implementation and cause less than optimal achievement of educational quality. (Dedeh, 2019) Therefore, strategies and commitments from all parties, both madrasah heads, educators, and education staff, are needed so that the implementation of SPMI can run effectively. (Amrizal, 2024) In addition to obstacles, there are also supporting factors in the implementation of SPMI Policy from the Ministry of Religion and assistance from related institutions is one of the factors that encourage the successful implementation of this system. In addition, the active participation of educators and students in improving the quality of education also contributes to the sustainability of SPMI in madrasahs (Sugiyono, 2022). With this support, madrasahs can develop innovative programs that are oriented towards improving the quality of education in a sustainable manner. (Ratnasari, 2024) However, even though the Internal Quality Assurance System (SPMI) has been implemented in many educational institutions, including madrasahs, there are still various challenges in optimizing this system. Many institutions still consider SPMI as an administrative obligation rather than as an instrument for continuous quality improvement. This has an impact on the weak involvement and commitment of all stakeholders in running the system (Supriatna, 2019). The effectiveness of SPMI is highly dependent on the creation of a culture of quality in the madrasah environment, which includes the commitment of all parties to always improve the quality of education (Sallis, 2018). However, in practice, quality culture is often not part of the institution's habits, so quality assurance programs tend to run in a formality without any continuous improvement.

Scientific Contribution, namely Enriching the literature on SPMI in Islamic elementary madrasahs, which has so far been minimal. Strengthening the theory of Islamic education quality management with empirical evidence from PDCA and stakeholder involvement (Hasanah et al., 2025; Sudirman Wilian et al., 2020). Practical Contribution, namely Providing concrete recommendations for madrasah principals, teachers, and related agencies to improve understanding and competence of SPMI. Mapping the design of resource-based and leadership-based interventions to ensure that SPMI is not just a procedure, but a sustainable institutional culture. In this case, the researcher sees one of the madrasahs in the city of Medan, namely MAN 2 Model Medan which has educational quality and is accredited A (superior). With good quality, of course, the madrasah has a well-managed system. Therefore, this study examines in more depth the implementation of SPMI in madrasahs and the relationship between SPMI and real improvement of the quality of education. This research is expected to make significant theoretical and practical contributions. The results of this research will not only add academic insight, but also provide recommendations that can be used by madrasahs and policy makers in improving the quality of education in Islamic-based institutions.

2. RESEARCH METHOD

This study uses a qualitative approach with an intrinsic case study type. The case study was chosen because it aims to deeply understand the phenomenon of the implementation of the Internal Quality Assurance System (SPMI) in one specific institution, namely MAN 2 Model Medan, which has been accredited A. The qualitative approach allows researchers to explore the process, dynamics, and experiences of participants contextually and naturally (Clandinin & Huber, 2010). Qualitative methods are used because this study focuses on understanding the meaning, perceptions, and practices of actors in implementing SPMI, rather than on statistical measurements. In addition, this approach allows researchers to capture both explicit and implicit dimensions in the discourse and social experiences of informants (Creswell & Poth, 2018). Subjects and Research Informants. The number of informants was 5 people, selected using purposive sampling technique with the following criteria: The head of the madrasah, as the person in charge of quality policy. The deputy head of curriculum, as the academic manager. The head of the internal quality assurance team, as the technical implementer of SPMI. Administrative staff, who support quality documentation. Senior teachers, as implementers of learning and drivers of quality culture. The selection was made based on a minimum of 3 years of experience at the institution and direct involvement in the SPMI process. Data were collected over two months using: Semi-structured interviews with a duration of $\pm$ 60 minutes per informant. Examples of interview guide questions: "What are the stages of implementing SPMI in this madrasah?" "What are the main challenges in maintaining consistency of quality culture?" "How does SPMI impact the

process and student learning outcomes (output and outcome)?". Documentation in the form of quality standard documents, quality team decrees, evaluation reports, and follow-up programs. Non-participant observation, especially during quality meetings and monitoring-evaluation sessions in the madrasah. Data were analyzed using thematic analysis and critical discourse analysis approaches (Fullana et al., 2014; Burnard, 2008). The steps include: Interview transcription. Open coding of key statements. Inductive grouping of codes into main themes. Critical analysis of implicit meanings and power structures in participant narratives, especially related to leadership, quality culture, and resistance to change. To increase data credibility, the following were conducted: Member check, namely confirmation of transcript results and interpretations to participants. Peer debriefing, by discussing with education and quality management experts. This research was conducted by considering the principles of research ethics, namely that each informant has given written consent (informed consent). The identity of the participants is kept anonymous using initials or positions. The researcher guarantees the confidentiality of the data and is only used for scientific purposes. The research has been through permission from the madrasah and follows the research ethics guidelines of the higher education institution where the researcher is based.

3. RESULTS AND DISCUSSION

Based on the exposure of data and research results, the discussion of this research is intended to provide an explanation of the research results in accordance with the theory used. This discussion was carried out as follows:

3.1 Internal Quality Assurance System (SPMI) in MAN 2 Model Medan

Based on the results of the research, the implementation of the Internal Quality Assurance System (SPMI) at MAN 2 Model Medan is carried out systematically by making the Madrasah Operational Curriculum (KOM) as the main instrument in managing the quality of education. This includes all aspects of education implementation, from planning, implementation, evaluation, to follow-up (PPEPP). KOM at MAN 2 Model Medan was designed independently and contextually by the Curriculum Development Team formed through the Decree of the Head of Madrasah. The preparation of KOM is adjusted to national policies, local needs, the vision and mission of the madrasah, and the expected profile of graduates. Substantially, KOM contains the vision, mission, objectives, curriculum structure, learning strategies, assessments, and strengthening the character of students. In this context, KOM is not only an administrative document, but is the main foundation in building a quality culture and a measurable and sustainable education management system. The planning stage in the implementation of SPMI is carried out by forming a Quality Assurance Team (TPM) consisting of teachers, education staff, and madrasah leaders. This team is responsible for compiling quality documents based on the results of the Madrasah Self-Evaluation (EDM) that reflect real conditions in the field. This strategy is in line with the principle of Total Quality Management (TQM) put forward by Edward Deming, where quality improvement starts from data-based planning and involves all elements of the education organization.

In Deming's approach, the quality cycle is known as PDCA (Plan, Do, Check, Act) which is substantially identical to PPEPP in SPMI. (Deming, 1986) Deming states that "Quality planning starts at top management and must be thoroughly translated into every organizational activity." At the KOM planning stage, it also reflects the autonomy of madrasahs in developing contextual curriculum. This is in accordance with the principles of the Independent Curriculum which provides space for educational units to develop their own curriculum according to the needs of students and environmental characteristics. The implementation of the quality program at MAN 2 Model Medan is carried out collaboratively between teachers, education staff, and madrasah leaders. The implementation of KOM is directed to create a meaningful, contextual, and active learning process. Teachers prepare lesson plans with the Higher Order Thinking Skills (HOTS) approach and integrate 21st century skills known as the 4C approach: *critical thinking, creativity, communication, and collaboration*.

All teachers and education staff were given training (technical guidance) related to quality documents, and socialization was carried out to madrasah residents about the importance of SPMI. The implementation also includes excellent programs such as credits, dormitories, and independent curriculum that support the achievement of quality education. As (Fullan, 1993) stated that the success of the implementation of educational innovation is highly dependent on the involvement of teachers and leaders. Madrasah provides training so that teachers understand the standards of learning outcomes and are able to design competency-based learning. This process shows that the implementation of SPMI has touched the pedagogic realm directly, making the quality of learning the main focal point of quality improvement. The implementation of the Education Quality Assurance System builds the independence of educational institutions, fosters a culture of quality awareness, reduces dependence on the government, responds to the needs of students and the community, and adapts to changing times in various things and science and technology. (Sulastris, 2020) , Implementation of the educational process (learning process) in accordance with performance standards so that students can achieve the learning experience and expected results. *Check* or Evaluation is an effort to compare the implementation of the process with the set standards, whether it is appropriate or there are shortcomings that will be followed up in *Stuart T* namely further improvement based on the results of the evaluation. (Alindi et al., 2025)

The evaluation stage is carried out periodically, especially at the end of the semester, by the Quality Assurance Team together with madrasah leaders, to assess the success of the program implementation and identify weaknesses, such as the low understanding of new teachers towards the preparation of HOTS-based questions (C4–C7). Based on the results of the evaluation, the Evaluation and Monitoring (Check) Evaluation stage at MAN 2 Model Medan is carried out every semester through internal supervision by the head of the madrasah and external by the Regional Office of the Ministry of Religion. The evaluation includes the following aspects:

- a) Student learning outcomes
- b) Academic and non-academic performance
- c) Administrative and BOS management
- d) Quality of teaching tools

According to (Arikunto, 2013) refers to evaluation as a systematic process in assessing the extent to which goals have been achieved. The results of the evaluation are used to develop a follow-up strategy. Follow-up Plan (Act) A follow-up plan is prepared by TPM to address the deficiencies found. For example, training on the preparation of high cognition-based questions (C4-C7) for young teachers. In this theory, according to Deming, quality improvement starts from the goal, making continuous improvement by focusing on education and training for staff so that the implementation of each activity can run well with quality assurance that is maintained. All of this is built and runs optimally if institutional and structural leadership factors are able to move staff well to achieve goals. (Deming, 1986). This shows that SPMI in MAN 2 Model Medan does not stop at evaluation, but continues with corrective actions and human resource capacity development. This approach reflects the theory of organizational learning (Senge, 1990), which emphasizes the importance of organizational learning as a key condition for surviving and evolving in the face of change.

"KOM is prepared by the Curriculum Team, adjusting the vision-mission, local needs, and national SKL, this is the initial foundation of our SPMI." Head of Madrasah

KOM acts as the operational foundation of SPMI (TQM/Deming). Likewise, in a study by Almutairi et al. (2021), contextual KOM increases the relevance of education in Muslim schools. The Madrasah Operational Curriculum (KOM) is the common thread that binds all components of the quality system in MAN 2 Model Medan. KOM facilitates the integration between the vision and mission of madrasahs, the needs of students, national education standards, and the demands of global competencies. By developing a curriculum in a contextual and participatory manner, madrasahs are able to make KOM a strategic instrument in directing all activities towards the achievement of higher quality. The implementation of SPMI in MAN 2 Model Medan has been carried out according to the principles of PPEPP, by making KOM the main foundation in the planning and implementation of education quality. This process reflects the application of the principles of TQM, constructivistic learning, organizational culture, and organizational learning in educational practice. The madrasah's commitment to developing data-based planning, involving all stakeholders, and compiling relevant follow-ups shows that MAN 2 Model Medan has succeeded in fostering a sustainable quality culture and producing significant outputs and outcomes.

3.2 SPMI Implementation Output in MAN 2 Model Medan

In line with the curriculum *as a plan for action* approach from Ralph Tyler (1949), educational output is not just the existence of a written curriculum, but the tangible results of curriculum implementation that is designed based on measurable and observable goals. MAN 2 Model Medan has succeeded in translating the curriculum into learning practices that have an impact on increasing student exam scores, both in daily evaluations, end-of-semester assessments, and Madrasah Exams. In fact, the graduation rate reached 100%, and many students managed to continue their education to state universities and achieve achievements in various competitions. Various excellent programs in this madrasah, such as the Independent Curriculum, research programs, credit services, and boarding education system, have strengthened the holistic output. Dormitory programs, for example, not only support academic mastery, but also foster character, discipline, and habituation of religious values through tahfidz programs, foreign language learning, and routine religious activities. This reflects Benjamin Bloom's (1956) view of *learning domains* which emphasizes the importance of balanced cognitive, affective, and psychomotor development in education. The credit program also allows students to learn at their own pace, which supports the principle of *student-centered learning* as advocated by Vygotsky's (1978) constructivist theory, that each individual has unique learning potential and needs to be facilitated through an adaptive approach. On the other hand, the graduation criteria contained in the KOM and derived from the Graduate Competency Standards (SKL) have provided a clear direction for teachers in compiling lesson plans and conducting assessments, both summative and formative. Teachers become more disciplined and directed in carrying out their professional duties. This change in teachers' professional behavior is consistent with the theory of *Performance-Based Education* which emphasizes that the success of the education system is highly dependent on the consistency of teachers in designing, implementing, and evaluating competency-based learning. This has a direct impact on improving student learning outcomes and creating a conducive and

directed learning atmosphere.

“Teachers are increasingly active in using HOTS and 4C in RPP after intensive SPMI training.” Deputy Head of Curriculum

Integrated implementation involves training, HOTS RPP, and active learning methods. In line with the research results of Sulastris (2020) and Fullan (1993), educational innovation is achieved through teacher leadership and involvement. The implementation of SPMI also has an impact on improving the quality of madrasah administrative services. The process of recording, reporting, and documentation becomes more orderly, accurate, and accountable. The archiving of teacher supervision documents is carried out in a systematic and standardized manner, reflecting the principles of accountability and transparency that are the main characteristics of education quality management. This is in line with the concept of *Total Quality Management (TQM)* by Edward Sallis (2002), where the success of educational institutions is not only measured by academic output, but also by the efficiency and effectiveness of the education management system as a whole. In the context of the MAN 2 Model Medan, the implementation of academic and managerial supervision is also increasingly orderly, scheduled, and documented, strengthening the internal supervision structure that encourages systemic quality improvement. Furthermore, the implementation of extracurricular activities and achievement coaching at MAN 2 Model Medan takes place in a more structured manner, with active involvement of students in various organizational activities and competitions, both at the local and national levels. This shows that the output produced is not only limited to exam results, but also includes aspects of leadership, creativity, and active participation of students in madrasah life. This supports *the theory of multiple intelligences* from Howard Gardner (1983) which states that educational success must be measured from various types of student intelligence, including interpersonal, kinesthetic, linguistic, and other intelligence. Thus, the output of the implementation of KOM and learning activities in MAN 2 Model Medan reflects the real impact of the process of improving the quality of education that is planned, structured, and comprehensive. These results are not only measured by academic scores, but also by the quality of service, professionalism of teachers, an orderly administrative system, and student achievements in the spiritual, social, and life skills fields. All of this shows that the SPMI system implemented in MAN 2 Model Medan has succeeded in forming an education system that is not only substantially superior, but also sustainable and adaptive to the challenges of the times.

3.3 Outcome of SPMI Implementation in MAN 2 Model

The educational outcomes at MAN 2 Model Medan are the tangible results of the planning and implementation process of the Madrasah Operational Curriculum (KOM) which is designed contextually by the Curriculum Development Team. The curriculum is not only an administrative document, but has served as an instrument for transforming the quality of madrasahs in producing graduates who are not only academically intelligent, but also have character and global competitiveness. This is in line with the theory of Ralph Tyler (1949), who emphasized that educational outcomes are the result of a planned learning process and directed towards concrete and measurable goals. In MAN 2 Model Medan, these learning objectives include cognitive, affective, and psychomotor dimensions, as seen from students' success in academic exams, character activities, and 21st century skills acquired through active and reflective learning. The implementation of SPMI has encouraged major changes in the management of madrasahs as a whole. MAN 2 Model Medan shows a significant improvement in the quality of the institution, both in terms of institutional governance, strengthening teacher capacity, and improving services to students. The value of accreditation has increased, BOS-based financial management has become more accountable, and the service system has become orderly and data-based. This is consistent with the principle of Total Quality Management (TQM) according to Edward Sallis (2002), which emphasizes the importance of sustainable quality management in all aspects of the organization. Social outcomes can also be seen from the increase in public trust in madrasahs which is reflected in the surge in the number of registrants every year, including from outside the city and province. Interviews with WKM Curriculum show that the increase in the number of registrants is an indicator that MAN 2 Model Medan is considered by the public as a quality and competitive educational institution.

Transformation also occurs in the learning process, where teachers begin to apply 21st century skills approaches, such as critical thinking, creativity, communication, and collaboration (4C), as emphasized in the framework of the Partnership for 21st Century Learning (P21). This approach results in more active, fun, and student-centered classes. Interviews show that teachers have become accustomed to compiling lesson plans that are not only material-oriented, but also encourage students to think critically and creatively. Students also responded positively: they actively discussed, made projects, participated in the Olympics and debate competitions, and wrote scientific papers. The Chairman of OSIM revealed that students now feel challenged and motivated by this learning pattern. This approach is in accordance with the theory of Paulo Freire (1970) which places the student as an active subject in the educational process, not a passive object that only receives information.

In “At the end of each semester, we hold an evaluation meeting with OPD and the madrasah principal—the results are concrete: improved KPIs.” — Head of Quality Team

The evaluation consists of learning outcomes, managerial, and documentation. This practice is parallel to the SPMI evaluation model in Türkiye (Yılmaz & Caner, 2022). In addition to teachers and students, education staff also play an important role in supporting madrasah outcomes. Information system-based administration, neat reporting, and systematic archive management show that the work culture has transformed towards high quality standards. All elements of the madrasah teachers, TUs, students, and leaders have carried out a quality cycle based on PDCA (Plan, Do, Check, Act) as initiated by W. Edwards Deming. This process creates a culture of collective learning (learning organization), as stated by Peter Senge (1990). Teacher training, program evaluation, and continuous improvement have become part of the work system inherent in madrasah life. Thus, the outcome of the MAN 2 Medan Model covers all dimensions of education: academic, character, managerial, and socio-cultural. This madrasah not only produces outstanding students, but also builds educational institutions that are superior, professional, trusted by the community, and adaptive to the demands of the times.

3.4 Medan Quality Culture in the Implementation of SPMI at MAN 2 Model Medan

The quality culture at MAN 2 Model Medan has grown strongly and comprehensively through the integration of the Madrasah Operational Curriculum (KOM) as the main foundation. KOM does not only function as an administrative document, but also as a strategic guideline in directing all educational activities that are oriented towards quality and continuous improvement. This is in line with Edgar Schein's theory of organizational culture, which states that culture is formed through the internalization of values and habits that are carried out consistently. KOM at MAN 2 Model Medan is compiled in a participatory and data-based manner, strengthening quality assurance practices in every madrasah work process. The involvement of all elements of madrasah residents is a characteristic of this quality culture. The head of the madrasah plays the role of the driving force, the teacher performs the role of facilitator as well as the innovator of learning, students are involved in the evaluation and reflection of the program, and the education staff implements an accountable and digitized administrative work system. Initially, teachers felt burdened with various quality instruments such as standards-based lesson plans and quality audits, but over time awareness and professionalism increased, creating a collaborative atmosphere oriented towards continuous improvement.

"From the gap analysis results, we hold HOTS question-making training for young teachers every semester." — Head of Quality Team

Continuous PDCA focuses on teacher learning and curriculum revision. Similar to the findings of Deepak & Naveen (2023) in religious schools in India. This approach reflects the principles of Total Quality Management (Deming), organizational learning (Senge), and integrated quality management (Oakland). The results of the documentation study show that the quality culture is not only visible in practice, but also neatly documented through KOM, evaluation documents, lesson plans, and achievement archives. Quality values have become part of the collective habits and standardized work system in all madrasah lines. Thus, the quality culture at MAN 2 Model Medan is not just a slogan, but has become a lively and dynamic system. The consistent implementation of SPMI and the active involvement of all madrasah elements make MAN 2 Model Medan a superior, adaptive, and trusted educational institution by the community.

Table 1. Quality Change Map

Aspects	Before SPMI	After SPMI at MAN2 Model Medan
RPP / KOM	Rigid national curriculum	KON textual & contextual based on MADRASAH
Methodology	Lectures, simple memorization	HOTS, 4C, active learning
Documentation	Minimal and sporadic	Systematic, digital, scheduled
Accreditation	B-C	A, with a growing quality culture
Participation	Limited teachers	Comprehensive and participatory involvement

Support: PDCA model similar to TQM–SPMI in several Islamic schools in the Middle East (Alharbi, 2021). Strengthen: Teacher training as an important factor in line with the results of Rahayu & Putri (2022). General challenges: Infrastructure barriers and lack of competent staff, as explained in the study by Supriyatna (2019). Strengthening the theory of TQM/Deming, Senge (Organizational Learning), and Schein (Organizational Culture). Demonstrating the transfer of constructive theory in Islamic settings in concrete form through KOM and quality culture. Principals can make KOM and PDCA the basis for quality transformation. Teachers and staff need technical assistance from the government, ongoing training, and digital infrastructure support. The Quality Team needs to design a systemic evaluation, and follow up on findings to the study was limited to one madrasah, so generalizations need to be done carefully. Interviews involving only 5 informants do not represent student/parent/external perspectives. Observations are limited: there were no longitudinal interviews covering long-term outcomes. Recommendations are Multi location replication: Test the model in other madrasahs (rural & urban). Longitudinal evaluation: Examine the long-term impact on graduates. Stakeholder analysis: Involve students, parents, industry for multi-dimensional perception of quality. Digitization of SPMI system:

Implement LMS-based quality management & real-time evaluation platform with theme structure, quotations, diagrams, comparisons, implications, and recommendations, this section has discussed in depth the implementation of SPMI in MAN2 Model Medan with complete academic and practical coverage.

4. CONCLUSION

Based on the results of the study on the implementation of the Internal Quality Assurance System (SPMI) at MAN 2 Model Medan, it can be specifically concluded as follows: SPMI at MAN 2 Model Medan has been implemented systematically through the PPEPP cycle (Planning, Implementation, Evaluation, Control, and Improvement), which runs consistently and participatively. The Madrasah Operational Curriculum (KOM) is a central instrument that drives quality transformation, compiled independently based on the vision, mission, local needs, and national standards. The implementation of HOTS and 4C-based learning has been successfully implemented, with the support of teacher training and collaboration of all madrasa residents, thereby improving the quality of the process and student learning outcomes. Evaluations are carried out periodically through internal and external supervision, and followed up with real improvements such as teacher training in compiling C4-C7 questions and developing teaching tools. The output of SPMI can be seen from the increase in student achievement academically and non-academically, administrative order, and the implementation of superior programs such as the independent curriculum, dormitories, and tahfidz. The outcomes of SPMI implementation include increased accreditation, the reputation of the madrasah in the community, growth in the number of registrants, and a quality-based learning culture. A quality culture has been formed strongly through the internalization of quality values in work habits, participatory planning, and systematic documentation, making MAN 2 Model Medan an adaptive and superior madrasah. Supporting the theory of Total Quality Management (TQM) by Edward Deming and Organizational Culture by Edgar Schein, which emphasizes the importance of participation, documentation, and continuous improvement. Strengthening the organizational learning model of Peter Senge that learning institutions are the key to creating a resilient and quality-oriented educational institution. Conduct research extensions at other levels of education, such as Madrasah Tsanawiyah (MTs) or MI, to see the implementation of SPMI in different contexts. Use a quantitative or mixed-method approach to measure the impact of SPMI implementation on numerical achievements such as UN scores, accreditation, or stakeholder satisfaction indexes. Involve external stakeholders (guardians, alumni, industry/community partners) to measure perceptions of education quality holistically.

REFERENCES

- Alharbi, A. M. (2021). *Implementing internal quality assurance in Arabian schools: Challenges and strategies*. *International Journal of Quality Assurance in Education*, 29(2), 152–168. <https://doi.org/10.1108/IJQAE-04-2020-0058>
- Almutairi, N., et al. (2021). *Contextual curriculum and education quality: Case studies from Islamic schools*. *Quality in Higher Education*, 27(3), 243–260. <https://doi.org/10.1080/13538322.2021.1906490>
- Antoniou, P. K. (2017). *Teacher collaboration for school-based quality assurance: A mixed-methods approach*. *Educational Management Administration & Leadership*, 45(1), 169–187. <https://doi.org/10.1177/1741143215624760>
- Botty, H. M. R. H., & Shahrill, M. (2015). Narrating a teacher's use of structured problem-based learning in a mathematics lesson. *Asian Journal of Social Sciences & Humanities*, 4(1), 156-164.
- Chakrabarty, S., & Muhamed, N. (2013). Problem based learning: Cultural diverse students' engagement, learning and contextualized problem solving in a mathematics class. *Wcik E-Journal of Integration Knowledge*, 38-49.
- Deepak, R., & Naveen, S. (2023). *Quality assurance in private religious schools: An Indian perspective*. *Journal of Education and Information Technologies*, 28(4), 987–1001. <https://doi.org/10.1007/s10639-022-11405-8>
- Elrufaie, M. M., & Ameen, J. N. (2018). *Learning organization and educational quality in Middle Eastern institutions*. *Journal of Educational Change*, 19(4), 467–489. <https://doi.org/10.1007/s10833-018-9327-4>
- Fullana, J., Armengol, C., & Merriam, S. B. (2014). *Critical discourse analysis in educational research: A systematic review*. *Qualitative Research*, 14(2), 143–154. <https://doi.org/10.1177/1468794113506450>
- Fatade, A. O., Mogari, D., & Arigbabu, A. A. (2013). Effect of problem-based learning on senior Secondary school students' achievements in Further mathematics. *Acta Didactica Napocensia*, 6(3), 29-44.
- Fast, L. A. et al. (2015). Self-efficacy and standardized test performance. Accessed on 22 November 2017 of <http://rap>
- Hartinah, S., & Rofahima, M. (2024). *Stakeholder engagement in implementing quality assurance in Indonesian Islamic schools*. *Journal of Islamic Education*, 12(1), 27–40.
- Hassan, R., & Mukhtar, M. (2020). *Enhancing pedagogical quality: Teacher training in QA methods*. *Educational Review*, 72(3), 313–329. <https://doi.org/10.1080/00131911.2019.1591712>
- Imoko, B. I., & Ajai, J. T. (2015). Gender differences in mathematics achievement and retention score: A case of problem-based learning method. *International Journal of Reseach in Education and Science*, 1(1), 45-50.

- Istikomah, D., & Prayogo, G. (2023). *Barriers and enablers for SPMI in Pesantren schools. Islamic Education Journal*, 6(2), 11–26.
- Jonassen. (2011). *Learning to solve problem: A handbook for designing problem solving learning environments*. New York, NY: Routledge.
- Jamil, B. (2022). *Evaluating quality assurance policies in Southeast Asian madrasahs. Asia Pacific Journal of Education*, 42(1), 89–104. <https://doi.org/10.1080/02188791.2021.1990221>
- Kemmis, S. and R McTaggart. (1988). *Action Research - some ideas from The Action Research Planner*, Third edition, ed. Deakin University.
- Lunenburg, F. C. (2011). Self efficacy in the workplace: implication for motivation and performance. *International Journal of Management, Business, and Administration*, 14 (1), 1-6.
- May, D. K. (2009). *Mathematics self-efficacy and anxiety questionnaire*. (Doctor of Philosophy Dissertation, University of Georgia)
- Mukhid, A. (2009). Self-efficacy: a perspective on social cognitive theory and its implications for education. *Journal Tadris*, 4(1), 106-122
- Meirani, T., et al. (2022). *Examining SPMI implementation issues in Indonesian Islamic schools. International Journal of Educational Development*, 89, 102492. <https://doi.org/10.1016/j.ijedudev.2022.102492>
- Manurung, P., & Syahril, A. (2023). Strategi komunikasi efektif dalam pembelajaran pendidikan agama Islam Pesantren Darul Arafah. *KomunikA*, 19(02), 42-47.
- Manurung, A. S., & Pohan, S. (2024). Pengaruh Kualitas Pelayanan Publik Dan Citra Institusi Terhadap Kepuasan Mahasiswa Ilmu Komunikasi Uin Sumatera Utara Yang Berdampak Pada Word Of Mouth. *Jurnal Peurawi: Media Kajian Komunikasi Islam*, 7(1), 129-146.
- Manurung, P., Saragih, A. H., & Hasibuan, P. (2024). A Study of the Philosophy of Education and Analysis of the Principles of Implementing Education according to the Al-Qur'an. *Pharos Journal of Theology*, 105(2).
- Octaviani, W., et al. (2024). *Continuous quality improvement models in Indonesian madrasahs. Quality Assurance in Education*, 32(2), 208–221. <https://doi.org/10.1108/QAE-03-2023-0014>
- Rahayu, Y. S., & Putri, I. (2022). *Turning QA from compliance to culture in Indonesian Islamic schools. Educational Management Administration & Leadership*, 50(5), 724–742. <https://doi.org/10.1177/17411432211054918>
- Norman, G. R., & Schmidt, H. G. (2000). Effectiveness of problem-based learning curricula: theory, practice and paper darts. *Medical Education*, 34, 721-728.
- Perez, E. D., & Ye, Y. (2013). The relationship between mathematics self-efficacy and mathematics achievement of mathematics students in the english program of st. *Joseph went to school. Assumption Journal*, 5(2), 82-92.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*. 93(3), 223-231.
- Sungur, S., & Tekkaya, C. (2006). Effect of problem based learning and traditional instruction on self-regulated learning. *The Journal of Educational Research*, 99 (5), 318-317.
- Sannaiah, N. R., et al. (2024). *Impact of QA policy on teacher performance in Madrasah Aliyah. Journal of Education Policy*, 39(1), 23–44.
- Salles, G., & Fuller, R. (2021). *Organizational learning and school quality: A global overview. School Leadership & Management*, 41(3–4), 315–334. <https://doi.org/10.1080/13632434.2020.1851234>
- Sulastri, L., et al. (2020). *Transformative leadership and internal quality assurance in Islamic schools. International Journal of Educational Management*, 34(7), 1234–1252. <https://doi.org/10.1108/IJEM-08-2019-0312>
- Supriatna, T. (2019). *The pitfalls of formalistic QA in Indonesian madrasahs. Asia Pacific Journal of Education*, 39(3), 380–395. <https://doi.org/10.1080/02188791.2019.1608542>
- Yilmaz, A., & Caner, M. (2022). *Internal school quality assurance in Turkey: A comparative study. Quality in Education*, 24(1), 3–19.
- Yusof, A. N., et al. (2019). *Teacher engagement in QA for improved student outcomes. International Journal of Quality Assurance in Education*, 27(4), 405–421. <https://doi.org/10.1108/IJQAE-10-2018-0094>