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INTERNAL QUALITY ASSURANCE OF THE LEARNING PROCESS IN ELEMENTARY SCHOOLS: THE DEMING CYCLE PRACTICE

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ABSTRACT

Improving the quality of education in Indonesia has become a major agenda of the government, especially through the implementation of the Internal Quality Assurance System (SPMI) policy as stipulated in the Minister of Education and Culture Regulation No. 28 of 2016. This policy requires every educational unit, including elementary schools, to form a quality assurance team tasked with managing and controlling the quality of learning. This research departs from the phenomenon in Bangkalan Regency, which is geographically close to the city of Surabaya but according to data from BPS 2024 is still included in the 3T (underdeveloped, outermost, and remote) region category. Several elementary schools in Bangkalan, despite being in areas with limitations, were able to achieve A accreditation and demonstrate outstanding academic and non-academic achievements. Therefore, this study was conducted in three leading schools, namely SDN Kemayoran 1, SDN Banyuajuh 3, and MIN 1 Bangkalan. All three have SPMI teams, but show different quality assurance characteristics from each other.

KEYWORDS: Internal Quality Assurance, PDSA, Deming Cycle, basic education, Learning Process

1. INTRODUCTION

To ensure the quality of education, the Indonesian government issued Regulation Number 28 of 2016, mandating that every educational unit establish an Internal Quality Assurance System (SPMI). The objectives of establishing SPMI are: (1) to oversee the implementation of education by educational units in primary and secondary education, thereby achieving quality education; and (2) to ensure compliance with standards in educational units in a systemic, holistic, and sustainable manner, thereby fostering a culture of quality within educational units independently(Ali et al., 2022; Hadi, 2021; Imron, 2009). Consequently, an interesting phenomenon has emerged: the formation of SPMI teams at the elementary school level.

The government appears serious about improving the quality of education, as evidenced by the 2021 baseline mapping of actual educational quality in the field (Kemdikbud, 2021). This is an evaluation program designed to improve education quality by capturing the input, process, and output of learning across all educational units. The National Assessment is conducted online using three instruments: the Minimum Competency Assessment (AKM Literacy and Numeracy) and the Character Survey for students, as well as the Learning Environment Survey (SULINGJAR) for teachers, principals, and educational staff. The assessment results are recorded in the National Education Report Card, which is stipulated in the Minister of Education, Culture, Research, and Technology Regulation Number 9 of 2022(Gustini & Mauly, 2019; Handayani et al., 2025; Mariatun et al., 2024). This regulation regulates the evaluation of the education system by the central and regional governments for early childhood education, primary education, and secondary education in order to fulfill the National Education Standards (SNP) as a form of continuous control, assurance, determination, and improvement of education quality. In line with this, the accreditation instrument for elementary schools/Islamic elementary schools or equivalent was established in 2024, which consists of four components, namely the performance of educators in managing student-centered learning processes, the leadership of the head of the educational unit in managing the educational unit, the climate of the learning environment, and the competency of student learning outcomes(Rahminawati & Supriyadi, 2023; Yinger & Daniel, 2009).

The enactment of regulation no. 28 of 2016 concerning the mandatory formation of SPMI teams in school units, especially in elementary schools, is an interesting phenomenon to study. Moreover, the implementation of SPMI in schools faces various challenges from various socio-economic conditions, resource allocation, and management practices of the educational unit itself. Likewise, the implementation of SPMI on the quality standards of the learning process in elementary schools in Bangkalan district, which according to BPS statistics (2024) and Presidential Decree No. 63 of 2020, is one of the 3T (Underdeveloped, poorest and outermost) areas. This is quite concerning because the distance between the city of Bangkalan and the metropolitan city of Surabaya as the capital of East Java is only thirty kilometers separated by the Madura Strait.

2. METHODS

The main focus of this research is to examine how internal quality assurance management in the learning process is implemented in elementary schools using the Deming cycle model (1982) which consists of four stages: Plan, Do, Study, and Act (PDSA). Using a multi-case study approach, this research aims to understand more deeply how quality planning, implementation, evaluation, and follow-up are carried out in the field, as well as comparing practices between schools to find relevant patterns and innovations. Data was collected through in-depth interviews, participant observation, and documentation studies. Data validity was maintained through source and method triangulation, member checking, and audit trails. The analysis technique used refers to the interactive model of Miles and Huberman, namely data condensation, data presentation, and drawing conclusions simultaneously throughout the research process(Cohen et al., 2001; Creswell & Creswell, 2018).

Based on recommendations from the Bangkalan Education Office and several senior elementary school teachers, researchers conducted initial observations and interviews at the target schools, namely elementary schools with A accreditation criteria. The selected schools are favorite schools with higher academic and non-academic rankings compared to other elementary schools in Bangkalan Regency. This indicates that quality assurance at these schools has been running well, so that the focus of this research can be accommodated. The selected elementary schools are known to have established internal quality assurance teams, as evidenced by the principal's decree. However, the implementation of quality assurance at each school requires further study, as each school has a distinct character and work culture. Consequently, each target school has

its own strategies and strategies for implementing internal quality assurance.

Analysis from a qualitative perspective includes three activity flows, namely data condensation, data presentation, and drawing conclusions (Miles, AM Huberman, 2018) as shown in Figure 3.4 below.

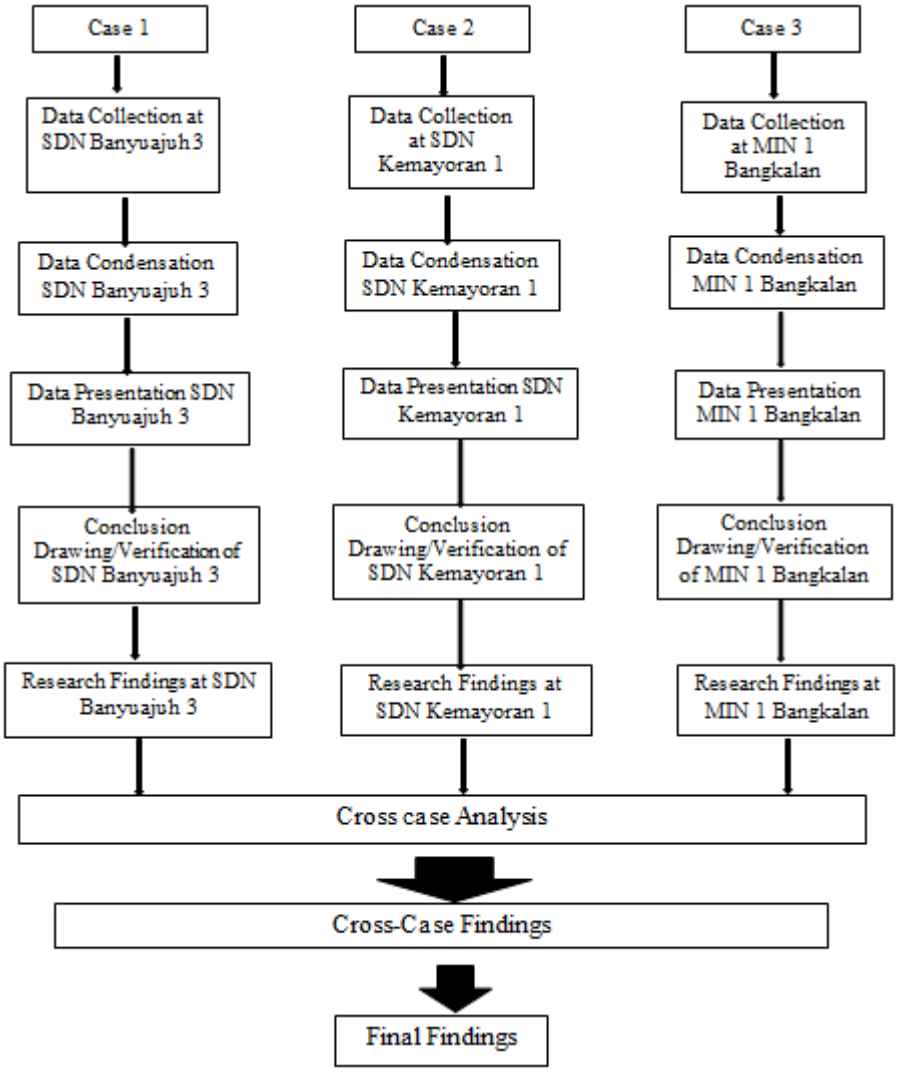

Figure 1: Individual and Cross-Case Analysis.

Based on initial observations, each target school emphasizes different quality domains: MIN 1 Bangkalan focuses on input: student selection and learning readiness scores; SDN Kemayoran 1 focuses on process: data-driven personalized learning; and SDN Banyuajuh 3 focuses on output: competition achievements, trophies, and accreditation scores.

The first research site was SDN Kemayoran 1 Bangkalan, a popular school with over 1,000 students. In an initial interview, the principal stated that achieving an A accreditation and a large student population was due to the collaboration of teachers who strive to provide the best for their students. Many breakthroughs in the learning process were made because the principal consistently motivated the teachers at the school.

A similar statement was also received from a teacher at MIN 1 Bangkalan, which, despite its religious-based curriculum, also implements the UMI method. Interestingly, this MIN school, in addition to using varied teaching methods and blended learning, also implements a rigorous student admissions selection process, even involving the services of a psychological agency. Therefore, quality control has been implemented from the outset in line with Sallis's principles of input, output, and outcome (2010). Only SDN Banyuajuh 3, a model quality assurance school in Bangkalan Regency, does not use UMI. The principal of SDN Banyuajuh 3 stated that he received guidance and training from the Education Quality Assurance Institute (LPMP) in 2017. Therefore, the researcher felt the need to conduct empirical evidence to determine whether SDN Banyuajuh 3 has a good internal quality

assurance system and can serve as a model for other schools.

3. RESULTS AND DISCUSSION

The research results show that during the planning stage (Plan), the three schools had quite different approaches. SDN Kemayoran 1 designed quality improvement programs based on student learning outcomes and character assessments, involving all teachers in the planning process, and utilizing a deliberation forum to build shared commitment. MIN 1 Bangkalan integrated student input selection with psychological assessments as part of its quality management, making input the foundation for contextual learning design. Meanwhile, SDN Banyuajuh 3 used LPMP training results as a reference in developing quality indicators, with a more structural approach based on accreditation documents.

During the implementation stage (Do), SDN Kemayoran 1 implemented the UMI (Review, Listen, and Implementation) method, accompanied by regular supervision by the principal. Teachers were given space to develop teaching media and independent learning strategies, which were reviewed in a reflective forum. MIN 1 Bangkalan combined blended learning with a religious values-based approach. SDN Banyuajuh 3 focused more on consistent implementation of established process standards, supported by systematic documentation and the use of rigorous learning administration tools.

The evaluation and monitoring phase (Study) revealed significant differences in the culture of reflection. SDN Kemayoran 1 has a weekly reflection system integrated into the teacher learning community, which discusses learning outcomes, student behavior, and parental responses. At MIN 1 Bangkalan, reflection takes the form of a monthly evaluation forum involving senior teachers and educational consultants. In contrast, SDN Banyuajuh 3 emphasizes documentation and evaluation reports as the basis for managerial reflection, with a focus on standards compliance and the achievement of formal indicators.

In the follow-up phase (Act), SDN Kemayoran 1 demonstrated high flexibility in changing teaching strategies based on evaluation results. The principal granted teachers autonomy to experiment with new learning models. MIN 1 Bangkalan tended to respond to monitoring results by strengthening additional tutoring, while SDN Banyuajuh 3 used evaluation results as a basis for improving its administration and supervision program.

Within each case, each school has its own strengths. SDN Kemayoran 1 excels in its reflective and innovative teacher culture, MIN 1 Bangkalan excels in its selection system and values-based approach, while SDN Banyuajuh 3 excels in its documentation and administrative compliance aspects. All three demonstrate that internal quality assurance cannot be rigidly standardized but must be adapted to the local context and school culture. The implementation of internal quality assurance relies not only on systems and documents but is also heavily influenced by the school's organizational culture, human resource competency, and leadership that supports innovation and collaboration.

4. IN CONCLUSION, PMI'S MANAGEMENT THROUGH THE DEMING-PDSA CYCLE IN THE LEARNING PROCESS AT THE THREE SCHOOLS DEMONSTRATES THAT:

1. PDSA is effective in fostering a reflection- and data-based quality culture.
2. Teacher participation and cross-stakeholder collaboration are key to successful planning.
3. Digitization and documentation are essential to ensuring sustainable quality.
4. Integration of values (religion, character, and locality) enriches curriculum and learning planning.
5. Formal SOPs are required in the Follow-up phase to consolidate study results into institutional policy.

Ultimately, this study confirms that PDSA is the heart of Internal Quality Assurance in the learning process. It is not simply a managerial procedure, but a way of thinking that encourages schools to continuously learn, adapt, and improve. Plan trains schools to build on data and reflection; Do encourages teacher innovation in learning; Study fosters a collective reflective culture; and Act ensures continuous improvement in a never-ending cycle. Thus, educational quality management through PDSA is a transformation journey towards a school quality culture, where educational success is not only measured by accreditation or formal documents, but by real changes in learning practices and students' learning experiences.

5. CONCLUSSION

Based on the cross-case discussion, it can be concluded that the success of PDSA in improving the quality of learning is largely determined by four key factors: (1) teacher professionalism, (2) the principal's leadership style, (3) community/parent involvement, and (4) the institution's capacity to translate data into concrete steps. The implementation of PDSA proves that ideal

educational quality stems from a culture of reflection and collaboration.

In conclusion, internal quality assurance of learning using the Deming cycle model can be a strategic and adaptive approach for elementary schools to improve educational quality. This model is effective in fostering a reflective culture, strengthening accountability, and accelerating data-driven decision-making. The implementation of this model relies not only on systems and documents but is also highly determined by the school's organizational culture, human resource competency, and leadership that supports innovation and collaboration. Therefore, the implementation of PDSA within the context of SPMI is a transformational step in building quality schools capable of responding to educational challenges sustainably.

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