

Improving Educational Quality Through the PPEPP Cycle in the Internal Quality Assurance System: A Case Study of Al Banna Middle School, Denpasar, Bali

Asrina Astagani¹, Khoirul Anwar²

^{1,2} Universitas Islam Sultan Agung Semarang, Indonesia; 10502500009@std.unissula.ac.id

ARTICLE INFO

Keywords:

Education Quality,
Internal Quality Assurance
System, Islamic Schools,
PPEPP, Sustainable
Quality Improvement.

Article history:

Received 2026-04-15
Revised 2026-05-12
Accepted 2026-06-27

ABSTRACT

Improving the quality of education is a strategic demand for educational units in facing scientific developments, social change, and global competition. The Internal Quality Assurance System (SPMI) through the Determination, Implementation, Evaluation, Control, and Improvement (PPEPP) cycle is an important instrument to ensure continuous quality improvement. This study aims to analyze the implementation of the PPEPP cycle in improving the quality of education at SMP Al Banna Denpasar Bali. This research method uses a qualitative approach with a case study design based on document analysis. Data were obtained from school profile documents, quality mapping, quality improvement program plans and implementation, internal quality evaluation and audit reports, and quality standard setting documents. Data analysis was carried out through data reduction, data presentation, and drawing conclusions. The results of the study indicate that the implementation of PPEPP was carried out systematically through quality mapping based on eight National Education Standards, the preparation of quality improvement programs, the implementation of human resource strengthening programs, the development of an integrated curriculum, and periodic internal quality evaluation and audits. The implementation of the PPEPP cycle has contributed to improving the quality of education, as demonstrated by improved school governance, a strengthened culture of quality, and a 47.27% increase in student enrollment from 275 in the 2020/2021 academic year to 405 in the 2025/2026 academic year. These findings demonstrate that the PPEPP cycle serves as a strategic instrument for achieving systematic, measurable, and sustainable improvements in education quality.

This is an open access article under the CC BY SA license.



Corresponding Author:

Rinda Lestari
Universitas Perintis Indonesia, Indonesia; tari.rinda12@gmail.com

1. INTRODUCTION

Improving the quality of education is a strategic issue in the development of quality and globally competitive human resources. The quality of education is not only determined by the academic achievements of students, but also by the effectiveness of school governance, the competence of

educators, the quality of the learning process, and the sustainability of the quality management system implemented by the education unit (Sulaiman & Wibowo, 2016). In the context of national education, quality improvement is an urgent need along with the demands of educational transformation, technological developments, and increasingly complex global competition. Therefore, every educational unit is required to have a mechanism that is able to ensure the achievement of quality standards in a systematic, measurable, and sustainable manner (Gustini & Mauly, 2019).

As an effort to ensure the quality of education, the Indonesian government developed an Internal Quality Assurance System (SPMI) which is implemented by each educational unit as part of the national education quality assurance system. SPMI is designed to ensure that the entire education process runs in accordance with the National Education Standards (SNP) through a continuous quality improvement mechanism (Harahap et al., 2022). The implementation of SPMI is carried out through the Determination, Implementation, Evaluation, Control, and Improvement (PPEPP) cycle which allows schools to identify problems, plan improvement programs, implement programs, evaluate achievements, and continuously improve quality standards (Gustini & Mauly, 2019).

Various studies show that the implementation of SPMI has a significant contribution to improving the quality of education. SPMI not only functions as an instrument for meeting educational standards, but also as a means of developing a culture of quality, strengthening school governance, improving the competence of educators, and improving the quality of educational services (Pater et al., 2020; Harahap et al., 2022). The success of SPMI implementation is greatly influenced by the commitment of the leadership, the involvement of all school residents, an effective evaluation system, and the use of data as a basis for decision-making (Zahrok, 2020).

The concept of PPEPP in SPMI has similarities with the principle of continuous quality improvement developed by Deming through the PDCA (Plan-Do-Check-Act) cycle. In this approach, quality improvement is understood as a process that takes place continuously through continuous evaluation and improvement. The implementation of PPEPP allows schools to reflect on actual conditions, identify quality gaps, formulate relevant improvement programs, and set new higher standards after the previous target is achieved (Zahrok, 2020). Thus, PPEPP is not only oriented towards meeting minimum standards, but also on sustainable quality development.

Al Banna Junior High School Denpasar Bali is one of the Islamic schools that implements an Internal Quality Assurance System systematically. Based on the school quality document, the implementation of PPEPP is carried out through the stages of quality mapping based on eight National Education Standards, root cause analysis, preparation of quality improvement plans, implementation of quality improvement programs, internal quality evaluation and audit, and determination of new quality standards. The implementation is directed to realize the school's vision, which is to produce a generation that is religious, superior, and globally competitive. The quality improvement program is focused on strengthening the competence of human resources, developing an integrated curriculum based on Islamic values, developing bilingual learning and STEAM, and strengthening the school quality management system.

Data on the development of the number of students shows a significant increase in the last six years. From the perspective of education quality management, an increase in the number of students can be seen as one of the indicators of increasing the reputation and competitiveness of educational institutions (Sulaiman & Wibowo, 2016). However, the increase in the number of students must be balanced with the strengthening of the quality system so that the quality of education services is maintained in a sustainable manner.

Although various studies have discussed the implementation of SPMI and the PPEPP cycle, most of the research still focuses on the context of higher education (Sulaiman & Wibowo, 2016) or on policy implementation aspects in general (Harahap et al., 2022). Studies that specifically document the process of improving the quality of education through the implementation of PPEPP in Islamic school-based secondary education units are still relatively limited. In addition, previous research has highlighted

more stages of SPMI implementation without explaining in detail the relationship between the stages of PPEPP in producing sustainable improvement in the quality of education.

Based on these conditions, this research is important to be carried out to analyze the implementation of the PPEPP cycle in the Internal Quality Assurance System at Al Banna Junior High School Denpasar Bali. This research not only describes the implementation of each stage of PPEPP, but also explains how the relationship between quality mapping, quality planning, program implementation, internal quality evaluation, and the establishment of new standards in supporting sustainable improvement of the quality of education. The research findings are expected to make a theoretical contribution to the development of education quality management studies as well as become a practical reference for other schools in implementing the Internal Quality Assurance System effectively.

2. METHODS

This research uses a qualitative approach with a case study type of research. The qualitative approach was chosen because the research aims to understand in depth the implementation process of the Internal Quality Assurance System (SPMI) through the Determination, Implementation, Evaluation, Control, and Improvement (PPEPP) cycle in an effort to improve the quality of education at Al Banna Junior High School Denpasar Bali. The case study is used to comprehensively examine the phenomenon of PPEPP implementation in a real context in an educational unit so that a complete picture of the quality assurance process carried out by the school is obtained.

According to Robert K. Yin, case studies are research strategies used to understand contemporary phenomena in real-life contexts when the boundaries between phenomena and contexts are not clearly visible. In this study, the phenomenon studied is the implementation of the PPEPP cycle as an instrument to improve the quality of education at Al Banna Junior High School Denpasar Bali.

The research was carried out at Al Banna Junior High School, Denpasar, Bali. The selection of the research location is based on the consideration that the school has systematically implemented the Internal Quality Assurance System (SPMI) through well-documented PPEPP stages, so that it is possible to conduct an in-depth study on the implementation of improving the quality of education.

The study used secondary data from official school documents. The documents analyzed include: 1) Profile of SMP Al Banna Denpasar Bali; 2) The vision and mission of the school; 3) Graph of the development of the number of students in 2020–2026; 4) Quality mapping document based on eight National Education Standards (SNP); 5) Document for the preparation of a quality improvement plan; 6) Documents for the implementation of the quality improvement program; 7) Internal quality evaluation and audit documents; 8) New quality standard determination document; 9) School development program documents and relevant quality reports.

These documents were chosen because they contain information that is directly related to all stages of the PPEPP cycle that are the focus of the research. The data collection technique was carried out through documentation studies. Documentation is used to obtain data on the implementation of SPMI and the PPEPP cycle that has been designed and implemented by schools. Documents are systematically analyzed to identify the stages of quality mapping, quality improvement planning, program implementation, internal quality evaluation, and the determination of new quality standards.

The focus of the research is directed at the implementation of the PPEPP cycle in improving the quality of education which includes: 1) Education quality mapping, namely the identification of quality achievements and gaps based on eight National Education Standards; 2) Quality improvement planning, namely the preparation of improvement programs and strategies based on the results of quality mapping; 3) The implementation of quality improvement is the implementation of quality improvement programs in the aspects of human resources, curriculum, and school management; 4) Internal quality evaluation and audit, namely the process of monitoring, evaluating, and auditing the implementation of quality programs; 5) Determination and improvement of quality standards, namely the preparation of new quality standards based on the results of internal quality evaluation and audits.

Data analysis was carried out using the Miles, Huberman, and Saldaña interactive analysis model which included three stages, namely: At this stage, the process of selecting, focusing, simplifying, and organizing data obtained from various school documents is carried out. Data relevant to the implementation of PPEPP and improving the quality of education were selected for further analysis. The data that has been reduced is then presented in the form of narrative descriptions, tables, and charts to facilitate understanding the relationship between the stages of PPEPP in the school's internal quality assurance system.

The last stage is carried out by identifying the patterns, relationships, and meanings of the data that has been analyzed. The conclusion of the research was obtained through the process of interpretation of the implementation of PPEPP and its contribution to improving the quality of education at Al Banna Junior High School, Denpasar, Bali. To ensure the validity of the data, the research uses the document source triangulation technique, which is to compare and examine the relationship of information contained in various school quality documents. This process is carried out to ensure the consistency of data regarding the stages of quality mapping, planning, implementation, evaluation, and quality improvement contained in school documents.

3. FINDINGS AND DISCUSSION

Implementation of the PPEPP Cycle in Improving the Quality of Education at Al Banna Junior High School Denpasar Bali

Quality Mapping Stage as the Basis for Quality Improvement Planning

The first stage in the implementation of the Internal Quality Assurance System (SPMI) at Al Banna Junior High School was carried out through quality mapping based on eight National Education Standards (SNP). Quality mapping aims to identify the actual condition of the school as well as find the gap between the standards set and the conditions that occur in the field.

The mapping results show that the main problems of schools are divided into two large groups, namely the human resource (HR) factor and the organizational system factor.

In the human resource aspect, several problems were found, including the gap in teacher competence, the weak role model of teachers, the dominance of young generation teachers who still need assistance, and the lack of a structured leadership regeneration system. These problems have an impact on the uneven quality of learning, the character of students who have not developed optimally, and the stability of learning that has not been consistent.

In the aspect of the organizational system, it was found that some quality documents have not been fully compiled, the organizational culture has not been optimally organized, administrative standards have not run uniformly, and the quality awareness of school residents has not been formed comprehensively.

These findings show that the quality of education is not only influenced by the individual competence of teachers, but also by the effectiveness of the school organizational system. This is in line with the view of Sallis (2015) who emphasizes that the quality of education is the result of the interaction between the quality of human resources and the quality of the organizational system that supports the educational process.

In the perspective of PPEPP, quality mapping serves as an organizational diagnosis stage that allows schools to objectively identify root causes before formulating improvement programs. The findings of this study reinforce the results of research by Ndoluanak et al. (2024) who stated that the success of SPMI implementation is highly determined by the quality mapping quality that is the basis for the preparation of quality improvement programs.

Quality Planning Based on Root Cause Analysis

Based on the results of the quality mapping, Al Banna Junior High School prepared a quality improvement plan through a *root cause analysis* approach. This analysis is carried out to identify the main causes of various problems found at the quality mapping stage.

The results of the analysis show that the low quality of learning is not solely caused by teacher competence, but also influenced by weak quality culture, non-optimal administrative system, and low internalization of quality standards in school organizations.

Based on this analysis, the school has prepared three strategic programs to improve quality, namely: 1) Strengthening human resource competence; 2) Strengthening the school system; 3) Development of school flagship programs.

Human resource strengthening programs include teacher professional training, strengthening English language skills, *peer observation programs*, *co-teaching*, and teacher spiritual coaching. This program shows that schools view teachers as the main factor in improving the quality of education.

The quality system strengthening program is focused on the preparation of quality documents, strengthening school SOPs, digitizing administration, developing organizational culture, and data-based evaluation systems. Meanwhile, the school's flagship program is directed at the development of bilingual schools, the integration of STEAM learning, and preparation towards international standard schools.

These findings show that the quality planning process at Al Banna Junior High School has adopted the principle of evidence-based planning, which is planning based on the results of needs analysis and school quality data. This approach is in accordance with the principle of Continuous Quality Improvement which places data as the basis for decision-making in educational organizations (Deming, 1986).

Implementation of Quality Improvement Programs through Integration of Human Resources, Curriculum, and Quality Management

The implementation stage of quality improvement is carried out through three main components, namely human resource development, curriculum strengthening, and strengthening school quality management.

The school carries out various teacher professional development programs through training, academic supervision, *coaching*, *mentoring*, and performance evaluation on a regular basis. The program aims to improve the pedagogical, professional, social, and spiritual competence of teachers.

These findings show that improving the quality of education at Al Banna Junior High School is oriented towards increasing the capacity of teachers as the main agents of learning. The results of this study support the findings of Fauzi et al. (2024) who stated that the success of SPMI implementation is greatly influenced by the quality of human resources involved in the education process.

In the curriculum aspect, the school develops an integrated curriculum that integrates the national curriculum with Islamic values. The implementation of the Qur'an tahfidz program, character education, bilingual schools, and STEAM learning shows that there are efforts by schools to balance religious competence and global competence.

This approach shows that the quality of education is not only interpreted as academic achievement, but also the formation of 21st century character and skills. The school also strengthens the quality management system through quality planning, organizational governance, infrastructure management, financing management, and partnerships with various stakeholders.

This condition shows that improving the quality of education at Al Banna Junior High School is carried out holistically through strengthening all components of the school organization.

Internal Quality Evaluation and Audit as a Quality Control Mechanism

The evaluation stage is carried out through an internal quality audit which is carried out systematically on all aspects of the school based on eight National Education Standards. Quality audit is carried out through five stages, namely: 1) Audit planning; 2) Audit implementation; 3) Evaluation and analysis; 4) Reporting; 5) Follow-up of improvements.

The results of the audit are used to identify the program's level of achievement, find remaining weaknesses, and formulate recommendations for improvement for the next period. From a quality management perspective, internal quality audits function as a control mechanism that ensures that all programs run according to the standards that have been set. The findings of this study are in line with

the research of Sulastriningsih et al. (2024) which states that evaluation and quality audit are important components in ensuring the effectiveness of SPMI implementation.

Furthermore, internal quality audits at Al Banna Junior High School are not only used to assess compliance with standards, but also as an organizational *learning instrument* that encourages schools to reflect and innovate continuously.

Improving Quality Standards and Their Impact on School Performance

The last stage of PPEPP is the improvement of quality standards. Based on the results of internal quality evaluation and audit, Al Banna Junior High School has set a new quality standard that is higher than the previous standard. Improving quality standards can be seen in the development of bilingual schools, STEAM integration, strengthening Islamic character, improving the quality of human resources, and expanding educational partnerships.

One of the indicators of the success of PPEPP implementation can be seen from the development of the number of students.

Table 2. Number of Students in 2020-2026

Academic Year	Number of Students
2020/2021	275
2021/2022	309
2022/2023	280
2023/2024	319
2024/2025	324
2025/2026	405

Data shows that the number of students increased from 275 students in 2020/2021 to 405 students in 2025/2026.

Increase as follows:

$$\frac{405 - 275}{275} \times 100 = 47,27\%$$

$$\frac{405 - 275}{275} \times 100\% = 47.27\%$$

The increase of 47.27% shows an increase in public trust in the quality of Al Banna Junior High School education services. From the perspective of education management, an increase in the number of students is often used as an indicator of increasing the reputation and competitiveness of educational institutions.

Discussion Synthesis

Based on all the research findings, the implementation of PPEPP at Al Banna Junior High School formed a systematic cycle of quality improvement:

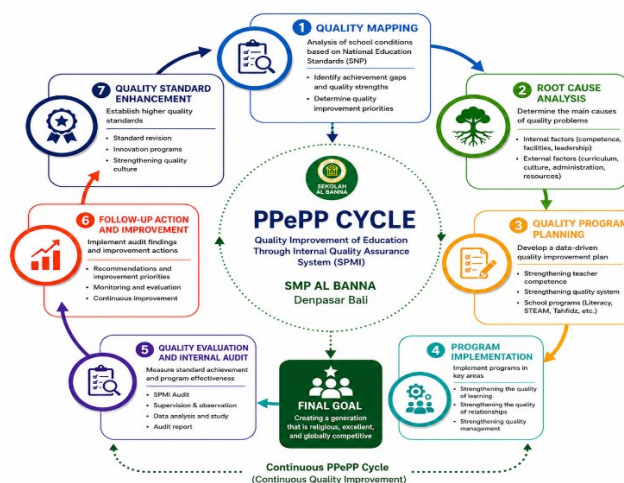


Figure 1. Model of Improving the Quality of Education Through the PPEPP Cycle

These findings show that the improvement in the quality of education does not occur spontaneously, but is the result of a quality assurance process carried out in a planned, measurable, and sustainable manner. The success of Al Banna Junior High School in improving the quality of education is determined by the integration of strengthening human resources, curriculum development, strengthening the quality management system, and the consistency of the implementation of the PPEPP cycle as *an instrument of continuous quality improvement*. These findings are an empirical contribution to the research that PPEPP is not just an administrative mechanism of SPMI, but functions as a strategy to improve the quality of education that is sustainable in Islamic education units.

4. CONCLUSION

The implementation of the cycle is carried out systematically through the stages of quality mapping based on eight National Education Standards (SNP), the preparation of quality improvement plans, the implementation of quality improvement programs, internal quality evaluation and audits, and follow-up in the form of determining higher quality standards. The success of the implementation of PPEPP is reflected in the improvement of the quality of school governance and the increase in public trust in Al Banna Junior High School. This is shown by the development of the number of students which increased from 275 students in the 2020/2021 school year to 405 students in the 2025/2026 school year or an increase of around 47.3%. This increase indicates that the implementation of SPMI through the PPEPP cycle has made a positive contribution to strengthening the quality of education services and the image of schools in the community.

Based on the findings of the research, it can be concluded that the PPEPP cycle is a strategic instrument in building a sustainable school quality culture. The success of improving the quality of education at Al Banna Junior High School is not only determined by the implementation of school programs, but also by the consistency of the implementation of the PPEPP cycle that connects the process of quality mapping, planning, implementation, evaluation, control, and quality improvement on an ongoing basis. This implementation model can be a best practice for other schools in developing an effective internal quality assurance system to realize quality, religious, superior, and globally competitive education.

REFERENCES

- Ahmad, I., Gao, Y., Moiz, S., & Assistant, H. (2017). *A Review of Ethical Leadership and Other Ethics- Related Leadership Theories*. 13(29), 10–23. <https://doi.org/10.19044/esj.2017.v13n29p10>
- Arcaro, J. S. (2017). *Quality in education: An implementation handbook*. New York: Routledge.
- Budiana, I., Wasliman, I., Hanafiah, H., & Rostini, D. (2024). Internal quality assurance system management (SPMI) in an effort to improve the quality of vocational education graduates. *Journal of Research Administration*, 6(1).
- Candra, D. G. A., Yusno, Z., Tambunan, L., Sofiati, E., Fauziyyah, A., Putra, B. P., Gusra, M. H., Ovela Putra, K., & Pane, E. P. (2025). Peningkatan mutu pendidikan tinggi melalui sosialisasi dan implementasi SPMI berdasarkan Permendikbudristek Nomor 53 Tahun 2023. *Mejuajua: Jurnal Pengabdian pada Masyarakat*, 5(2).
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Deming, W. E. (1986). *Out of the crisis*. MIT Press.
- Fattah, N. (2013). *Sistem penjaminan mutu pendidikan*. Remaja Rosdakarya.
- Fauzi, M. A., Alim, N., & Harsoyo, R. (2024). Implementation of the internal quality assurance system (SPMI) as an effort to improve the quality of higher education in Indonesia. *JP (Jurnal Pendidikan): Teori dan Praktik*, 9(2), 175–183. <https://doi.org/10.26740/jp.v9n2.p175-183>
- Fauzi, M. R., & Faslah, R. (2025). Analisis implementasi pengendalian mutu pendidikan tinggi di Indonesia. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(4). <https://doi.org/10.23969/jp.v10i04.38251>

- Gustini, N., & Mauly, Y. (2019). Implementasi sistem penjaminan mutu internal dalam meningkatkan mutu pendidikan dasar. *Jurnal Isema: Islamic Educational Management*, 4(2), 229–244.
- Harahap, M. S., Gultom, S., Darwin, & Nasution, N. F. (2022). Kajian implementasi SPMI (Sistem Penjaminan Mutu Internal) sekolah dan perguruan tinggi di Indonesia. *Jurnal Education and Development*, 10(1).
- Kementerian Pendidikan dan Kebudayaan. (2016). *Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 28 Tahun 2016 tentang Sistem Penjaminan Mutu Pendidikan Dasar dan Menengah*. Kemendikbud.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Mulyani, S., & Sohiron. (2025). Analisis implementasi siklus PPEPP dalam penjaminan mutu pendidikan tinggi di Indonesia. *Jurnal Manajemen Pendidikan*, 11(2). <https://doi.org/10.34125/jmp.v11i2.1768>
- Mulyasa, E. (2017). *Manajemen dan kepemimpinan kepala sekolah*. Bumi Aksara.
- Musfah, J. (2015). *Peningkatan kompetensi guru: Melalui pelatihan dan sumber belajar teori dan praktik*. Kencana.
- Ndolanak, Y. H., Husnorofik, Z., Riyadi, R., & Ridwan, A. (2024). Urgensi sistem penjaminan mutu internal terhadap peningkatan mutu di Sekolah Tinggi Ilmu Kepolisian. *Jurnal Evaluasi Pendidikan*, 14(2), 46–53. <https://doi.org/10.21009/jep.v14i2.45809>
- Pater, I. M., Yudana, I. M., & Natajaya, I. N. (2020). Studi evaluasi implementasi Sistem Penjaminan Mutu Internal (SPMI) dalam rangka mewujudkan budaya mutu. *Jurnal Pedagogi dan Pembelajaran*, 3(1), 13–21.
- Sallis, E. (2015). *Total quality management in education* (3rd ed.). Routledge.
- Sulaiman, A., & Wibowo, U. B. (2016). Implementasi Sistem Penjaminan Mutu Internal sebagai upaya meningkatkan mutu pendidikan di Universitas Gadjah Mada. *Jurnal Akuntabilitas Manajemen Pendidikan*, 4(1), 17–32.
- Zahrok, A. L. N. (2020). Implementasi sistem penjaminan mutu internal di Sekolah Menengah Kejuruan (SMK). *Jurnal Akuntabilitas Manajemen Pendidikan*, 8(2), 196–204.
- Uno, H. B., & Lamatenggo, N. (2016). *Tugas guru dalam pembelajaran: Aspek yang memengaruhi*. Bumi Aksara.