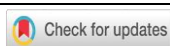




## Implementation of an Internal Quality Assurance System (IQAS) in Vocational Schools

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### ABSTRACT

**Objective:** This research aims to understand and analyze content related to implementing an internal quality assurance system based on eight national education standards in Vocational High Schools (VHS) with CIPP model evaluation metrics. The evaluation was conducted to see the results of implementing the internal quality assurance system in vocational schools by eight national education standards. **Methods:** The type of research used is evaluation research. In this research, researchers used quantitative methods with the CIPP (Context, Input, Process, Product) evaluation model developed by Stufflebeam. The population in this research is the academic community of VHS Sunan Giri Menganti Gresik, which knows and understands the implementation of the internal quality assurance system (IQAS). Based on existing data, the population in this study was 72 people, including the school principal, curriculum leader, teacher council, education staff, and head of the school quality assurance team. **Result:** IQAS provides services by eight National Education Standards (SNP) to exceed the expectations of educational service users. School Self-Evaluation (EDS) describes the quality and produced information processed using government information systems. This mutual mapping is explained to identify areas of improvement using the IQAS Vocational School Transformation guide. **Novelty:** Implementing the quality assurance system in model schools and its impact is carried out through four stages: Setting Standards, Fulfilling Standards, Continuous Evaluation, and Quality Improvement. Decentralization of education encourages school autonomy to improve the quality of institutions and their graduates with strategies such as school reviews, benchmarking, quality assurance, and quality control.

## INTRODUCTION

The national education system described in Law Number 20 of 2003 is an integrated set of educational components to achieve national education goals, namely developing talents and improving Indonesian people's quality of life and dignity. Improving the quality of education in educational units must be supported by a culture of quality (Alayoubi et al., 2020; Guaman-Quintanilla et al., 2023; Rahnuma, 2020; M. et al. et al., 2020; Zamboni et al., 2020). Improving the overall quality of schools requires an approach that includes all elements of the educational unit (whole school approach) to create a culture of quality jointly. An education quality system must be developed at all levels of education implementation so that quality assurance can run effectively (Sumeyasa et al., 2020).

Training quality assurance is a series of activities or systems designed to ensure that the training process and its results meet specific quality standards. Training quality assurance focuses on continuous improvement in the quality of education through assessment, instruction, and corrective action. Education Quality Assurance (EQA) is very important to achieve the goal of quality education that meets community needs. The Internal Quality Assurance System is a system developed and implemented by

educational institutions or organizations to guarantee and improve the quality of Services or products produced independently (Ahmed et al., 2020; Ammar et al., 2021; Cugno et al., 2021; Li et al., 2020; Pozzi et al., 2023; Wilson & Campbell, 2020). IQAS aims to ensure that a facility or organization meets established quality standards and can improve quality continuously.

Education in Indonesia has national standards regulated through the Minister of Education and Culture Regulation No. 22 of 2016. These standards cover eight critical aspects, namely (1) the Content Standards, which determine subject matter, core competencies, and achievement indicators for each level of education. (2) Process Standards explain learning procedures, teaching methods, and evaluation of student learning outcomes. (3) Assessment Standards guide student assessment approaches, methods, and tools. (4) Graduate Competencies, identifying the minimum competencies and skills that students must have. (5) Educator and Educator Standards determine educators' qualifications, competencies, and ethics. (6) Facilities and Infrastructure Standards relate to educational facilities' requirements and standards. (7) is the Education Management Standard, which develops school administration and human resource management guidelines. (8) Education Financial Standards provide a framework for managing financial resources to support a sustainable education system.

Based on the eight standards above, a chain of input, process, and output will be formed. Graduate competency standards are one form of output in this series. The inputs include management standards, standards for educators and education personnel, facilities and infrastructure standards, and financing standards. The process series includes content, process, and evaluation standards. The output circuit will be achieved if the input circuit is complete and the process runs smoothly. Educational institutions must make every effort to provide services and ensure quality so that they can meet national education standards or exceed the quality targets set by the government, both for education managers and practitioners (Abbas, 2020; Bojović et al., 2020; Bordoloi et al., 2021; Demir et al., 2021; Özer, 2020; Santos et al., 2020).

Sunan Giri Gresik Vocational School is one of the secondary education institutions that implements the Internal Quality Assurance System (IQAS). The status is accredited A, which means it has met the quality assurance criteria. There are five majors, including 1) Motorcycle engineering, 2) Computer and network engineering, 3) Office automation and management, 4) Accounting, and 5) Industrial mechanical engineering (Kadir & Rama, 2023; Mahmud et al., 2022; Siswayanti, 2022).

However, several things still need attention or encounter obstacles, such as many graduates working without having the right skills and competencies and needing to search for graduates, which takes a long time because they do not have an alumni WhatsApp group. The education quality assurance index is a process of learning and managing the quality of educational units, which has an impact on the formation of a culture of quality and improving the quality of schools (Arifudin, 2022; Asnawan, 2021; Baharun et al., 2021; Garira, 2020; Jami & Muharam, 2022; Mohzana et al., 2024; Rodríguez et al., 2022). Then, regarding facilities and infrastructure, efficient laboratories are inadequate due to the large number of students in each department. Apart from that, WiFi still does not cover the entire school area; only a few rooms can access the WiFi network. Based on the description above, researchers are interested in taking the title evaluation of implementing the Internal Quality Assurance System to realize a school quality culture at Sunan Giri Gresik Vocational School.

## RESEARCH METHOD

The method in this article uses library research, namely collecting data by understanding and studying theories from various literature related to the research. There are four stages of library study in research: preparing the necessary equipment, preparing a working bibliography, organizing time, and reading or recording research material (Saphira et al., 2023). This data collection uses the method of searching for sources and constructing them from various sources, such as books, journals, and research that has already been carried out. Library materials from various references are analyzed critically and must be in-depth to support the propositions and ideas.

## RESULTS AND DISCUSSION

### *Result*

IQAS involves all aspects of education management and optimizes various existing resources to achieve established national education standards. The IQAS implementation process includes five activity stages, namely: 1) Introduction of educational quality based on national standards by educational institutions; 2) Designing a quality improvement plan documented in the School Work Plan (SWP); 3) Implementation of quality improvement efforts in the management of educational institutions and learning processes; 4) Monitoring and evaluating the implementation of quality improvement efforts that have been carried out; and 5) Establishment of new standards and development of strategies to improve quality based on monitoring and evaluation results. Effective implementation of IQAS has positive impacts, such as increasing student achievement, improving school performance, and, most importantly, graduating with high competence (Darmaji et al., 2019).

IQAS is a quality assurance mechanism that operates within educational institutions. Implementing IQAS in Vocational High Schools involves all elements within the educational institution. Each educational institution develops and implements IQAS independently, following the instructions contained in the IQAS implementation guide. The main principle of implementing IQAS is independence, which means that all activities related to the school's internal quality assurance system, including planning, implementation, and supervision, are carried out independently.

### *Discussion*

Research conducted by Sahroni (2020) discusses the Transformation of IQAS State Vocational High School 2 Bandar Lampung. In this research, IQAS offers services that comply with the eight National Education Standards to exceed the expectations of educational service users. Implementing an internal quality assurance system begins with quality mapping through School Self-Evaluation (SSE). SSE collects various data and information, which is then processed using an information system managed by the government to accurately assess the quality achievement of every aspect of national education standards. The results of this quality mapping are then analyzed thoroughly to identify areas that require improvement by referring to the procedures set out in the Internal Quality Assurance System Transformation in Vocational High Schools (Akhmatova et al., 2022; Dias et al., 2022; Janssens et al., 2022; Logachev et al., 2021; Martínez-Morales & Marhuenda-Fluixá, 2020; Sony et al., 2020).

Quality mapping is carried out on each element of national education standards, including the indicators contained therein, using concrete evidence such as syllabi, lesson plans, assessment instruments, and supervision instruments. It is recommended

that the results of quality mapping resulting from school self-evaluations be explained concisely while providing meaningful information (Kemendikbud RI, 2016). Then, the data is checked to ensure its accuracy, processed and analyzed by the School Education Quality Assurance Team to obtain the latest and most accurate information that can reflect the quality achievements of VHS 2 Bandar Lampung against national education standards (Hastin et al., 2022). In this process, the problems faced by the school during the past year related to each element of national education standards were also identified, and the School Education Quality Assurance Team prepared recommendations for improvement for the future.

From the results of quality mapping, priority needs will be determined as a basis for developing plans to fulfill or improve quality. In preparing this plan, the School Education Quality Assurance Team will consider several aspects, such as the school's vision and mission, internal policies, and central and regional policies, to achieve national education standards and remain effective. This plan will be represented in a quality planning document or SWP, both for the medium and long term, which includes quality fulfillment programs, objectives, implementation strategies, success indicators, and cost estimates.

Once ratified, the SWP will be socialized to all school members and then implemented thoroughly, involving the Principal, teachers, staff, students, and parents. At VHS 2 Bandar Lampung, almost all parties have shown high awareness and commitment to this implementation. The School Education Quality Assurance Team continuously monitors the implementation of quality compliance to ensure the achievement of the expected goals. Evaluation of the implementation of quality compliance is carried out through school self-evaluation, aimed at assessing its effectiveness and conformity with the Internal Quality Assurance System Transformation in Vocational High Schools to ensure continuous quality improvement.

Determining quality standards at VHS 2, Bandar Lampung also considers the school's vision, mission, and goals and accommodates its capabilities. These quality standards can change over time and be adjusted to the quality expectations desired by the parties involved in education. Education stakeholders, such as parents, society, government, and industry, often have varying perceptions about the quality of education.

VHS 1 Pandak also implements the Internal Quality Assurance System. In research conducted by Atmaja (2022), supporting and inhibiting factors were found in implementing the Internal Quality Assurance System (IQAS) at VHS 1 Pandak. Implementing the IQAS program in schools outlines four main variables: communication, Human Resources (HR), disposition, and bureaucratic structure, as well as three pillars of organizing activities: organizing, interpretation, and application/planning. (a) Communication: It was found that information delivery, transmission, clarity, and consistency were carried out well during policy implementation. This is demonstrated by stressing every year as needed. (b) Human Resources: The formed IQAS team is selected based on their abilities and expertise in the relevant field and then tested before implementing the IQAS program. (c) Disposition: Good support from the Principal, IQAS team, school committee, and parents, as well as their involvement in implementing the IQAS program. (d) Bureaucratic Structure: There needs to be more flexibility and complexity in the bureaucratic structure, with operational standards determined through the Principal's Decree. The implementation process at the organizing stage involves making a decree

for the school quality assurance team, management, and activity schedule by the Principal (Hadi et al., 2023; Idris et al., 2022a, 2022b; Musliadi et al., 2021; Rahman et al., 2021; Tambrin et al., 2021). At the interpretation stage, socialization is carried out regarding the IQAS program every school year, and there is a commitment from the program implementers. At the application/implementation stage, the IQAS program has activities such as School Self-Evaluation and mapping, RKJ/RKJM planning, implementation of RKS/RKJM, monitoring and evaluation, and establishing new quality standards.

Supporting factors in implementing the IQAS program at VHS 1, Pandak includes active support from the school principal and school committee. The school principal is the primary person responsible for the IQAS program and has issued important decisions regarding its duties and implementation. The school committee also supports the IQAS program by holding coordination meetings and monitoring its implementation. Apart from that, strong cooperation and commitment between school quality assurance teams is an essential supporting factor (Bandur et al., 2022; Nurlaili et al., 2021; Tamrat, 2022; M. Yurkofsky, 2021; Zaid et al., 2022). This team succeeded in coordinating well, both within and outside the implementation of the IQAS program. The provision of facilities and infrastructure is also an essential factor that supports the smooth implementation of the program.

However, there are several inhibiting factors in implementing the IQAS program. There needs to be more understanding of school components related to the IQAS program, which still needs to be addressed. Apart from that, many programs running simultaneously are another obstacle. Schools often face time constraints in implementing the IQAS program, mainly due to the limited teaching hours of teachers who are divided into many teachers. Also, delays in collecting reports and documents can complicate the analysis process and preparation of subsequent reports.

Rosdiana and Soedarmo (2019) also researched the implementation of IQAS in model schools and impact schools. Implementing the model and impacting the school quality assurance system has undergone four stages: setting standards, fulfilling standards, continuous evaluation, and quality improvement. The initial stage, namely Standard Determination, covers various aspects such as Graduate Competency Standards, Content Standards, Process Standards, Assessment Standards, Educator and Education Personnel Standards, Management Standards, Facilities and Infrastructure Standards, and Financing Standards. After discovering the problem, the Principal formed a School Quality Assurance TEAM and committed to all staff. The IQAS TEAM then discussed and proposed an improvement program based on the School Self-Evaluation. The Principal decides on the available budget by monitoring and evaluating programs that are feasible to implement. The Principal is responsible for continuous quality improvement by implementing innovation and other improvements.

The implementation of the school quality assurance system at VHS 1 Panjalu (model school) and Panjalu Poultry Industry Vocational School (impact school) has gone well and has had a positive impact on improving the quality of educational services. This implementation process includes four main stages: Standard Setting, Standard Fulfillment, Continuous Evaluation, and Quality Improvement. Even though several standards still need to be improved, VHS 1 Panjalu has succeeded in guiding VHS IPP in implementing a quality assurance system. On the other hand, VHS IPP provides lessons and feedback to VHS 1 Panjalu to continue improving quality. The decentralization of education has encouraged school autonomy and improved the

quality of schools and graduates. Both schools have successfully implemented a quality assurance system and continue striving to improve the quality of their institutions.

Strategy is a comprehensive approach to ideas, planning, and implementing activities within a certain period. This also applies to educational institutions such as schools, which need strategies to improve the quality of education. A strategy is needed to formulate specific steps the school will take within a certain period. There are four strategies/techniques used by schools to improve quality, namely school review, benchmarking, quality assurance, and quality control (Alawaysheh et al., 2020; Du Plessis, 2021; Harcourt, 2023; Lim et al., 2023; Mayordo & Durias, 2021). VHS 1 Panjalu and VHS IPP have implemented a School Review strategy by involving all stakeholders in every school activity. Benchmarking has also been carried out by both schools, where they analyze each other's needs, strengths, and weaknesses for future quality improvements. Strategic planning is essential for both schools because it leads to a systematic and procedural approach, improving school quality and high-quality output. Quality assurance is an important technique to ensure that the educational process runs well (Ayoub Shaikh et al., 2022; Brander et al., 2020; Giatman et al., 2020; Mohzana et al., 2023; Mosqueira-Rey et al., 2023). This involves ongoing and institutionalized monitoring, providing feedback to the school, and assuring parents that the school always provides the best service to students. Implementing quality assurance helps schools gain the trust of all stakeholders. Even though they have not achieved maximum results, both schools have experienced significant progress in improving the quality of education. Apart from that, both also implement quality control to detect deviations in output quality from established standards. Both schools use the same four strategies to improve quality: school reviews, benchmarking, quality assurance, and quality control. Each school has its unique approach to ensuring that its graduates are ready to compete globally in various industrial and social sectors.

The Internal Quality Assurance System has been implemented in various VHSs, including VHS 1 Surabaya (Wahyuni & Murtadlo, 2019). The Indonesian government has attempted to improve the quality of education through various steps, such as increasing the education budget, teacher certification, and providing facilities (Herman et al., 2021; Kawuryan et al., 2021; Setia & Nasrudin, 2020; Suharno et al., 2020; Sukadari et al., 2021; Tabroni et al., 2022). However, this effort is considered not optimal because it focuses more on external factors. Therefore, an Internal Quality Assurance System was developed to improve the quality of education internally. IQAS is implemented within the education unit by all educational components. VHS Negeri 1 Surabaya has implemented IQAS independently by involving stakeholders and a team of auditors selected by the school principal. To maximize the implementation of IQAS, schools have a quality assurance team that reports directly to the Principal. Schools also carry out self-evaluations by involving stakeholders to prepare quality maps and quality fulfillment plans. The school also has a School Quality Assurance Team (SQAT), which plays a role in quality assurance in education management.

However, there is a possibility that schools commit fraud by manipulating data and information. To improve the quality of education, the data and information used must be appropriate to conditions in the field so that errors are avoided in planning for quality fulfillment. Research shows that VHS Negeri 1 Surabaya uses accurate data and information in implementing an internal quality assurance system, such as RPP and SYLABUS, as supporting documents, following educational process standards. VHS Negeri 1 Surabaya also implements the ISO 9001:2015 quality management system,

which refers to National Education Standards. It has goals, targets, and quality policies created together with quality management consultants. Previous research also shows that the development of IQAS implementation at UGM refers to the International Organization for Standardization Quality Management System.

In practice, internal quality assurance must be carried out structured and continuously by establishing clear and measurable periods and quality objectives. Implementing the Internal Quality Assurance System involves five steps: quality identification, quality improvement planning, implementation of quality compliance, evaluation through audits, and continuously setting new standards. Research shows that VHS Negeri 1 Surabaya has implemented IQAS in a structured and sustainable manner by setting quality standards, conducting internal audits, planning quality compliance, and implementing quality compliance through the participation of all school members with stakeholder support. Evaluation is carried out through management review meetings.

In addition, schools also have organized programs to meet customer needs, including the use of questionnaires, suggestion boxes, and counseling for teachers and students. The implementation of IQAS is in line with the Minister of National Education Regulation No. 63 of 2009, which emphasizes that guaranteeing the quality of education is a structured and integrated effort to improve the quality of education for the nation's progress. VHS Negeri 1 Surabaya has implemented this system in a structured and continuous manner by complying with established quality standards.

VHS Negeri 1 Surabaya reviewed the policy for changing deputy principals because conditions did not support the previous policy at that time. The school also audits all aspects, including the quality assurance team: audits cover programs, documents, and human resource performance. The school has succeeded in implementing comprehensive internal quality assurance, which provides added value because quality compliance and quality improvement are carried out comprehensively. All activities related to internal quality assurance need to be well documented as indicators of auditor performance, quality achievements, and references for improvement. Research shows that all activities related to IQAS implementation have been well documented in various documents, such as internal audit results, meeting minutes, and student complaints. This follows the IQAS implementation principles issued by the primary and secondary education directorate general.

The application of IQAS to vocational schools is also described in research conducted by Zahrok (2020). At VHS Negeri 35 Tulungagung, the Internal Quality Assurance System is run by the School Education Quality Assurance Team (TPMPS), which consists of the Principal, teachers, staff, and school committee representatives. As a model school, VHS 35 Tulungagung is committed to maintaining the quality of education by government directions. The internal quality assurance system is implemented comprehensively by involving all elements of the school. The quality assurance concept is implemented collaboratively with the active participation of school principals, teachers, and staff as a solid team. School self-evaluation involves all school components at the end of each school year. The evaluation process includes preparing instruments, collecting data, analyzing data, and creating quality maps that refer to national education standards. Quality mapping is carried out on every aspect of national education standards using physical evidence such as syllabi, lesson plans, assessment instruments, and supervision instruments (Ibnusaputra & Jumadi, 2022; Khailova, 2021; Mendoza et al., 2022; Mobit et al., 2024; Okojie et al., 2022).



The quality fulfillment plan is designed as a school work plan, including the school's vision and mission, internal policies, and central and regional policies. This RKS is evaluated and approved by the school principal before being socialized to all school members. Once ratified, the School Work Plan is implemented comprehensively with the participation of all elements of the school, including the Principal, teachers, staff, students, and parents. The quality fulfillment process is constantly monitored by TPMPS and evaluated to ensure continuous quality improvement. Determining quality standards involves all school personnel and is based on the school's vision, mission, goals, and capabilities. These quality standards can be adjusted over time by stakeholders' expectations, such as parents, society, government, and parties in the business and industrial world. All efforts in quality assurance at VHS 35 Tulungagung recorded good results in the Internal Quality Assurance System report.

## CONCLUSION

**Fundamental Findings:** Implementing the quality assurance system in model schools and its impact is carried out through four stages: Setting Standards, Fulfilling Standards, Continuous Evaluation, and Quality Improvement. Decentralization of education encourages school autonomy to improve the quality of institutions and their graduates with strategies such as school reviews, benchmarking, quality assurance, and quality control. **Implication:** IQAS provides services by eight National Education Standards to exceed the expectations of educational service users. School Self-Evaluation maps quality and produces information that is processed using government information systems. This quality mapping is analyzed to identify areas of improvement using the IQAS Vocational School Transformation guide. Priority needs are planned in the Fulfillment or Quality Improvement Plan, which is the basis for the School Work Plan, which includes programs, objectives, strategies, success indicators, and cost estimates. The school work plan is socialized and implemented involving all school components. IQAS is also based on the school's vision, mission, and goals and is adjusted to the educational quality expectations of stakeholders such as parents, society, government, and industry. **Limitation:** In implementing IQAS, supporting factors include support from the school principal, school committee, cooperation, commitment of the quality assurance team, and adequate facilities and infrastructure. Meanwhile, inhibiting factors include a need for more understanding of school components related to IQAS, many programs being run simultaneously, limited time, and delays in collecting reports and documents. **Future Research:** In future research, the implementation of IQAS in vocational high schools in other regions will be studied so that similarities and differences regarding the implementation of IQAS in each district will be seen to guarantee the quality of education.

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