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UTILIZATION OF THE SIMAKER S/M APPLICATION TO IMPROVE SCHOOL QUALITY IN SEMARANG CITY

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ABSTRAK

Penjaminan mutu internal di sekolah merupakan aspek krusial dalam upaya peningkatan kualitas pendidikan. Penerapan teknologi informasi, seperti aplikasi SIMAKER S/M, menawarkan solusi potensial untuk mengoptimalkan proses penjaminan mutu. Pengabdian masyarakat ini bertujuan untuk memberikan pelatihan aplikasi SIMAKER S/M dalam melakukan penjaminan mutu internal sekolah di Kota Semarang. Pengabdian masyarakat ini terdiri dari empat tahapan utama: (1) Sosialisasi, melalui Focus Group Discussion (FGD); (3) Pendampingan; dan (4) Evaluasi, Survei kepuasan pengguna menunjukkan bahwa aplikasi SIMAKER S/M sangat mempermudah pekerjaan administrasi sekolah terkait dengan penjaminan mutu internal sekolah. Rata-rata skor kepuasan pengguna adalah 4.24 untuk kemudahan penggunaan, 4.42 untuk peningkatan transparansi, dan 4.48 untuk manfaat keseluruhan. Implementasi aplikasi juga berhasil membantu peserta pelatihan terkait pelaksanaan penjaminan mutu internal dan memfasilitasi pelaporan yang lebih akurat. Dari hasil kegiatan pengabdian hasil respone dan umpan balik dari peserta dirasa sangat bermanfaat dalam upaya melakukan penjaminan mutu internal di sekolah berbasis digital. Setelah melakukan evaluasi diri melalui penjaminan mutu internal ini harapannya sekolah dapat melakukan tindak lanjut dari aspek yang dirasa perlu ditingkatkan

ABSTRACT

Internal quality assurance in schools is a crucial aspect in efforts to improve the quality of education. The application of information technology, such as the SIMAKER S/M application, offers a potential solution to optimize the quality assurance process. This community service aims to provide SIMAKER S/M application training in conducting internal quality assurance in schools in Semarang City. This community service consists of four main stages: (1) Socialization through Focus Group Discussion (FGD), (3) Mentoring, and (4) Evaluation; user satisfaction surveys show that the SIMAKER S/M application greatly facilitates school administration work related to internal quality assurance in schools. The average user satisfaction score is 4.24 for ease of use, 4.42 for increased transparency, and 4.48 for overall benefits. The implementation of the application also succeeded in helping training participants related to the implementation of internal quality assurance and facilitating more accurate reporting. From the results of the community service activities, the results of the responses and feedback from participants were considered very useful in efforts to conduct internal quality assurance in digital-based schools. After conducting self-evaluation through internal quality assurance, it is hoped that schools can follow up on aspects that need to be improved.

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INTRODUCTION

Quality assurance is the entire process of establishing and fulfilling quality management standards carried out consistently and continuously in order to achieve the vision and mission as a form of responsibility and fulfillment of promises to stakeholders. School quality assurance is absolutely necessary as a consequence of stakeholder demands for the provision of quality education that produces competent and skilled graduates (Ridwan, A., 2015). The assurance and improvement of education quality is a shared responsibility of education stakeholders along with the government. In Indonesia, education quality assurance has been regulated under the Government Regulation of the Republic of Indonesia Number 19 of 2005 concerning National Education Standards, which explicitly states that all educational units, whether formal or non- formal, are required to implement quality assurance in a gradual, systematic, and planned manner through a quality assurance program that has clear targets and timelines.

In line with this policy, an education quality

assurance system was subsequently developed, one of which is the Internal Quality Assurance System (SPMI). The Internal Quality Assurance System (SPMI) is a quality assurance mechanism implemented by educational institutions (Wahyuni, R. R. W., & Murtadlo, M., 2019). SPMI is carried out independently by each school by following the cycle outlined in the Education Quality Assurance System (SPMP) and is implemented by all members of the school community. SPMI functions as an early warning system, meaning that when it is implemented carefully and accurately, it can serve as a means of improvement in relation to the education delivery process, preventing it from deteriorating further (Sarmono, A., Supriyanto, A., & Timan, A., 2020) Pramono, N. H., & Kambut, A. (2025).

The Subject Teachers' Forum for Office Administration (MGMP-AP) of Semarang City is an association consisting of 45 vocational high school (SMK) teachers from 15 different schools across Semarang City who specialize in Office Administration. The MGMP-AP plays a strategic role in enhancing and strengthening teacher competencies through regular discussions, peer learning, and professional development training.

Several efforts have been made by the Education Office and school leadership teams to overcome the challenges in implementing internal quality assurance, such as conducting manual workshops on SPMI, providing printed guideline books, and holding occasional seminars. However, these efforts have not resulted in consistent or sustainable implementation due to the lack of digital infrastructure and follow-up monitoring systems.

In relation to the implementation of the Internal Quality Assurance System (SPMI) at vocational high schools (SMKs) specializing in Office Administration that are part of the MGMP- AP of Semarang City, the head of MGMP-AP Semarang City stated that the implementation of SPMI faces various challenges, namely: 1) there is no digital platform available to support the implementation of SPMI; 2) internal quality

assurance in schools is not carried out consistently or regularly; 3) preparations for quality assurance are often done hastily, especially during the accreditation period; 4) after quality assurance activities are completed at school, schools are often uncertain about their actual quality status because the process is done manually and the SPMI results tend to be inaccurate; 5) schools are not yet able to systematically map out their strengths and weaknesses, making it difficult to formulate targeted improvement programs.

In relation to the challenges faced by vocational high schools (SMKs) that are part of the Office Administration MGMP (MGMP-AP) of Semarang City in implementing the Internal Quality Assurance System (SPMI), these issues are further clarified by survey data collected from 45 SMK teachers who are members of the MGMP-AP Semarang City. The chart data (Figure 1) shows that the implementation of SPMI in all SMKs under MGMP-AP Semarang is still conducted manually (100%). This condition impacts several aspects, including longer implementation time, inefficiency in conducting SPMI activities, and the increased likelihood of inaccuracies in manually generated SPMI results. The percentage of problems encountered by teachers in implementing SPMI at MGMP-AP member schools in Semarang City is as follows:

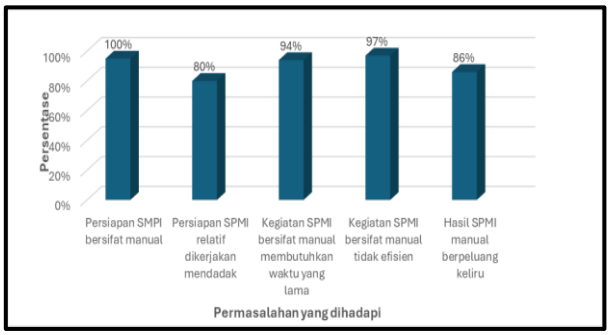

Figure 1. Problems of the Internal Quality Assurance System (SPMI) in Schools

The problems faced by the partner schools in implementing internal quality assurance also have an impact on school accreditation. Currently, schools only carry out external quality assurance, which is conducted every five years by the National Accreditation Board for Schools/Madrasahs (BAN S/M), and do not implement any internal quality assurance systems. This is in accordance with the Decree of the Minister of National Education No. 087/U/2002, and as explained by Saifulloh, M., Muhibbin, Z., & Hermanto, H. (2012), school accreditation aims to provide an overview of school performance as a tool for coaching, development, and quality improvement, as well as to determine the eligibility level of a school in providing educational services. This condition also reflects the accreditation status of vocational schools (SMKs) that are part of the Office Administration MGMP (MGMP-AP) in Semarang City.

The MGMP-AP is an organization of teachers specializing in Office Administration or Office Management and Business Services in Semarang City. In reality, schools offering Office Administration, Office Management, and Business Services programs have not yet implemented a digital School Quality Assurance System. This stands in contrast to the competencies already possessed by MGMP-AP Semarang City, which

ideally should already have strong quality performance management and well-managed archiving practices. Based on interviews and observations with the Chairperson of MGMP-AP Semarang City, several issues were identified, including challenges in technology adoption, work culture, and overall school quality.

Based on the problems faced by the partner—specifically in the areas of technology adoption, work culture, and school quality—the community service team, in collaboration with PT. Digiplan Global Integrasi (PT. DGI), has taken the initiative to strengthen school quality assurance through the use of an application called "SIMAKER S/M" (School and Madrasah Performance Management System) for schools that are members of MGMP-AP Semarang City. "SIMAKER S/M" is an application that can be adopted for implementing the Internal Quality Assurance System (SPMI) in schools and madrasahs. The application was developed based on the needs of schools/madrasahs in relation to SPMI or accreditation. SIMAKER S/M is the result of collaborative research conducted between the research team from the Faculty of Economics and Business at UNNES and PT. DGI in a previous study.

The selection of MGMP-AP Kota Semarang as a partner is a strategic choice in efforts to improve school quality. The field of office administration or office and business management is well-suited to serve as a pioneer in implementing the concept of school quality assurance. The proposed solutions address the three priority issues faced by the partner in this community engagement program.

One of the efforts to maintain school quality is to conduct an internal academic quality audit, known as the Internal Quality Assurance System (SPMI), to evaluate compliance with established quality components (D. B. Prasetya, U. Radiana, T. Junanto, and H. Mening, 2022; A. Sihombing, 2022). The implementation and management of SPMI data can be more easily carried out using technology or an application. This approach also helps save time, costs, and effort (Firdaus, M. and E. Ronando, 2022). Furthermore, Isda Pramuniati, Arnita, and Insan Taufik (2020) emphasize that the use of technology in implementing SPMI can properly archive documents and make the SPMI activities more effective compared to manual methods. Additionally, Mohammad Sofyan S. Thayf and Arianti (2021) state that document management applications applied in SPMI demonstrate that quality assurance activities work well and effectively in providing data and presenting information accurately.

With the solution offered to MGMP-AP through the implementation of the SIMAKER S/M application, it is expected to have a positive effect on improving school quality. The target achievement after schools or madrasahs use the SIMAKER S/M application is that they will be able to carry out the Internal Quality Assurance System (SPMI) effectively, thereby improving the quality of the school.

METHOD

The method of implementing the community service activities used to address priority issues in strengthening the quality aspects of schools involves the service team designing the following approach:

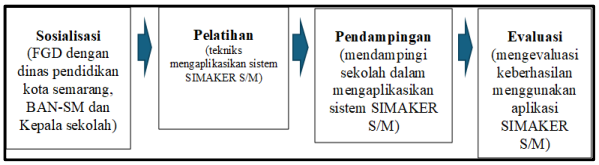

Figure 2. Alur Pelaksanaan Pengabdian Masyarakat

a. Socialization

The socialization activity for MGMP-AP Kota Semarang is conducted using the Focus Group Discussion (FGD) technique involving the Semarang City Education Office, BAN-SM Kota Semarang, and school principals. During the socialization, several topics will be discussed, namely: 1) regulations regarding the internal quality assurance standards (SPMI) applicable to MGMP-AP Kota Semarang, presented by the Semarang City Education Office; 2) accreditation as a reflection of school quality and performance, presented by BAN-SM Kota Semarang; 3) introduction to the SIMAKER S/M application, presented by the community service team and PT. DGI.

b. Training

The training activity is conducted by the community service team and PT. DGI, who directly demonstrate how to operate the SIMAKER S/M application to the visited schools and digitize the SPMI documents. During the school visits, it is expected that all teachers and school administrators attend. This is because the system in SIMAKER S/M is integrated with school activities that must be fully archived..

c. Asssistance

At this stage, the community service team and PT. DGI will assist the school in inputting SPMI or accreditation documents into the SIMAKER S/M application, as well as support the school in analyzing the results from the SIMAKER S/M system, including school performance quality. The assistance phase will be carried out periodically throughout the service period.

d. Evaluation

The evaluation and monitoring activities are carried out by the community service team and PT. DGI by assessing the success of the schools in using the SIMAKER S/M application. This involves measuring several aspects, namely: 1) the school's independence in operating the SIMAKER S/M application; 2) the completeness of the data entered into the SIMAKER S/M application; 3) the school's ability to develop strategic plans to improve school performance quality in the future based on the output results from the SIMAKER S/M application. This evaluation activity also aims to gather feedback related to the implementation of the community service. This evaluation model refers to the community service evaluation framework proposed by (Sudrajat & Purwanti, 2020), which emphasizes the importance of measuring outcomes, process efficiency, and sustainability impact.

With the approach methods to be implemented in this community service, it is expected to have a positive impact on improving the quality management of school performance.

The implementing team of this partnership community service consists of various disciplines to support the success of the activities. To achieve the program's output targets, this activity involves lecturers, partners, and students from various fields of expertise, especially in archival technology, educational management, and the IT development team.

To evaluate the success of the community service activities, both qualitative and quantitative measurement tools were used. The quantitative instruments included structured surveys distributed to training participants, focusing on three key dimensions: ease of use, perceived transparency improvement, and overall benefit of the SIMAKER S/M application. Each item was rated on a Likert scale from 1 (strongly disagree) to 5 (strongly agree).

In addition, qualitative data were obtained through open-ended feedback forms and in-depth interviews with selected school representatives. These tools provided insights into participants' experiences, challenges encountered, and recommendations for future improvement.

The level of success of this community service was measured by: (1) the number of schools successfully operating the application independently; (2) the completeness of data entered into the system; (3) the schools' ability to generate action plans based on the self-assessment results; and (4) the sustainability commitment of the schools beyond the training period.

RESULT AND DISCUSSION

1. Socialization Activities

The socialization was conducted through a Focus Group Discussion (FGD) involving the Semarang City Education Office, the National Accreditation Board for Schools/Madrasahs (BAN- SM) of Central Java Province, and principals from various schools in Semarang City. From this activity, several outcomes were obtained, including that the majority of participants demonstrated a good understanding of the importance of internal quality assurance but had limited knowledge about the SIMAKER S/M application. Feedback from several participants considered the SIMAKER S/M application as a potential solution to address the challenges faced in internal quality assurance. Some participants expressed the need for further support regarding the technical use of the application and its integration with existing systems.

Figure 3. Socialization Activities

2. Training Activities

The training provided to school principals and relevant staff included both theoretical and practical sessions related to the implementation of quality assurance using the SIMAKER S/M application. The training aimed to enhance users' skills for application in internal quality assurance at schools. The majority of participants demonstrated improved ability in using the SIMAKER S/M application. These skills were measured through practical tests and observations during the training, and by the end of the training process, participants were able to conduct self- assessments and effectively use the SIMAKER S/M application.

Regarding participant readiness, there was variation in schools' preparedness to use the application independently. Schools with more technical and experienced staff showed higher readiness compared to schools with less technical experience. Feedback from the

training participants was generally positive, highlighting the clarity of the training materials and the support from trainers, although some participants requested more time for hands-on practice. Additionally, several suggestions regarding application features were submitted to the program team.

3. Assistance Activities

During the assistance period, online consultations were conducted with several schools experiencing difficulties in implementing internal quality assurance using the SIMAKER S/M application. Assistance was provided through online consultations, and when necessary, direct on-site support was carried out at schools to monitor the implementation of the SIMAKER S/M application.

Key findings during the implementation of SIMAKER S/M included: Schools that had implemented SIMAKER S/M were able to conduct self-assessments to independently predict quality through the use of the application, including improvements in quality data management and reporting. However, some schools faced technical challenges, such as hardware compatibility and network issues that hindered the implementation process. Additionally, the separate storage of documents caused difficulties in retrieviing documents later on. Furthermore, efforts to build discipline and create a culture of active involvement by principals and staff in the implementation process contributed significantly to the successful use of the application for improving internal quality assurance in schools.

Figure 4. Training and Mentoring Activities

4. Evaluation

Evaluation was conducted by collecting data from the use of the application and the results of the school quality assessments. The evaluation results included an increased understanding among training participants regarding the urgency of internal quality assurance in educational institutions. The data from the activities showed that some schools were already able to perform self-assessments related to internal quality assurance using the SIMAKER S/M application. This was evident from the improved accuracy of quality reports and greater efficiency in the monitoring process. The interface of the SIMAKER S/M application can be seen in the following figure

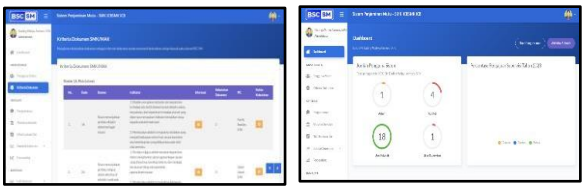

Figure 5. SIMAKER S/M Interface

After the training and mentoring activities were conducted, a survey was carried out. The survey results showed a high level of satisfaction among the application users, with the majority feeling that SIMAKER S/M has made their work easier and increased transparency. This can be seen in Table 1.

Table 1. SIMAKER S/M Survey Results

Aspect	Disagree	Neutral	Agree	SS	Average Skor
Ease of Use	2%	4%	10%	40%	4.24
Improved Transparency	0%	2%	8%	34%	4.42
Overall Benefits	2%	2%	6%	30%	4.48

Challenges Faced During Training and Mentoring Several schools reported issues concerning advanced training and technical support that need to be addressed to ensure more effective use of the application. They also expressed the desire for the
application to always be provided free of charge to schools.

The survey results from SIMAKER S/M users will be linked to the stages of the community service process that have been carried out, as well as expert opinions and previous research findings, to provide a more comprehensive perspective.

Survey results related to the ease of use of the application show that the majority of respondents (84%) agreed or strongly agreed that the SIMAKER S/M application is easy to use, with an average score of 4.24. During the training phase, we taught principals and staff how to use the SIMAKER S/M application. This training was designed to ensure that users understand and can operate the application smoothly. The survey results indicating a high ease of use demonstrate that the training provided was effective in facilitating the adoption process of the application. This aligns with Davis's (1989) Technology Acceptance Model (TAM), which emphasizes that ease of use is a key factor in technology adoption. The high ease of use suggests that the SIMAKER S/M application is designed with an intuitive interface, supporting this theory and showing that the training successfully reduced the learning curve. Additionally, research by Venkatesh et al. (2003) indicates that ease of use influences users' attitudes toward technology. Our findings, consistent with this theory, show that the SIMAKER S/M application is easy to operate and contributes to wider adoption among users.

Regarding the improvement of transparency in reporting, the majority of respondents (90%) felt that the SIMAKER S/M application has enhanced transparency in reporting, with an average score of 4.42. during the mentoring phase, we monitored the implementation of the applicationin schools and provided technical assistanceto ensure the system was used effectively. The reported increase in tran sparency indicates that this mentoring was successful in helping schoolw mqximize the use of the applicationreporting features. This aligns with heakd's (2006) view that transparency in reportng impoves accountability and information comprehension. With the SIMAKER S/M application, transparency in reporting is optimized, supporting this theory by providing users with better and clearer access to quality data.

Furthermore, according to Moffitt and Seidman (2015), an effective management information system can improve transparency and data quality. Our findings that SIMAKER S/M enhances transparency in reporting are consistent with these findings, confirming that the mentoring provided was effective in increasing the use of the application's reporting features to produce outputs related to school quality assessment.

Regarding the overall benefits of the SIMAKER S/M application, the majority of respondents (90%) felt that the SIMAKER S/M application provides significant benefits, with an average score of 4.48. During the evaluation phase, we collected data on the effectiveness of the application in improving school quality. The survey results, which showed significant overall benefits, reflect the successful implementation and effectiveness of the application in achieving the expected internal quality assurance goals. Gable et al. (2003) stated that the overall benefits of technology depend on its impact on work efficiency and effectiveness. Our findings that SIMAKER S/M provides substantial benefits support this view and indicate that the application successfully improves the efficiency and effectiveness of managerial processes in schools. Gable et al. (2003) Widodo, J., Murniaty, I., Sehabuddin, A., Listiyani, A., & Rohmah, I. N. (2024) also found that effective technology can optimize organizational processes and outcomes. Our finding that the SIMAKER S/M application facilitates work and provides great benefits aligns with these results, confirming that the application evaluation has demonstrated success in delivering the anticipated benefits.

CONCLUSION

The user satisfaction survey results for the SIMAKER S/M application indicate ease of use, increased transparency, and significant overall benefits. These findings align with the stages of the community service process, which include socialization, training, mentoring, and evaluation. The high ease of use reflects the success of the training in facilitating technology adoption. The increase in transparency in reporting demonstrates the effectiveness of mentoring in helping schools optimize the use of the application. The overall benefits experienced indicate that our evaluation successfully assessed the positive impact of the application on school quality.

By linking the survey results with the stages of the community service process, expert opinions, and previous research, we can better understand the success of the SIMAKER S/M application in improving the quality of education in Semarang City and identify areas for further improvement.

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