



Studies in Technology and Education

Volume 3, Issue 3, 2024 | <https://www.azalpub.com/index.php/ste>

OPEN ACCESS

Article Info

Received:

June 27, 2024

Accepted:

July 23, 2024

Published:

October 08, 2024

Keywords

Development
Principal collaborative
Academic supervision
Madrasa ibtidaiyah

Suggested Citation:

Faizin, A., Hariyadi, A., Setiadi, G., & Pratama, H. (2024). Development of Principal Collaborative-Based Academic Supervision at Madrasah Ibtidaiyah, Rembang Regency. *Studies in Technology and Education*, 3(3), 99- 106.

RESEARCH ARTICLE

DEVELOPMENT OF PRINCIPAL COLLABORATIVE-BASED ACADEMIC SUPERVISION AT MADRASAH IBTIDAIYAH, REMBANG REGENCY

Ashiful Faizin

Universitas Muria Kudus, Central Java, Indonesia

Ahmad Hariyadi

Universitas Muria Kudus, Central Java, Indonesia

Gunawan Setiadi

Universitas Muria Kudus, Central Java, Indonesia

Hendri Pratama

Sultan Idris Education University, Perak, Malaysia

Abstract

This study explores the implementation of collaborative-based academic supervision to improve teacher competency in Madrasah Ibtidaiyah in Rembang Regency. Collaborative-based academic supervision is characterized by partnership-based interactions between supervisors and supervisees. The research employs a research and development (R&D) methodology, combining qualitative and quantitative data analysis techniques. Data collection methods include interviews, observations, documentation, and questionnaires. Expert validators, including education management experts, education practitioners, and language experts, assessed the feasibility of a guidebook for collaborative-based academic supervision. The findings indicate that principals and teachers in three Madrasah Ibtidaiyah in Rembang Regency recognize the need for collaborative-based academic supervision guidelines. The validated guidebook was deemed suitable for use, and teachers affirmed its appropriateness for enhancing supervision practices.

*Corresponding author: hendripratama.tvet@gmail.com

INTRODUCTION

Education is a crucial endeavor that accelerates the development of human potential, vital for nation-building. Consequently, Indonesia must cultivate individuals who can thrive in diverse situations, possess a spirit of independence, and compete globally. Quality education is essential for producing such individuals, who are not only needed in the workforce but also in educational organizations. Key personnel in these organizations include school principals, teachers, and administrative staff, with teachers being pivotal to a school's success due to their direct involvement in the teaching and learning process (Hamid, 2017). Teachers play a critical role in the quality of education, necessitating their seriousness, responsibility, and optimal performance (Sari et al., 2021).

Indonesia's education programs aim to eliminate illiteracy and develop superior human qualities with complex capabilities (Sani, 2022). This goal aligns with the nation's high birth rate, emphasizing the need for education that equips individuals to thrive amidst global competition. At the elementary level, Madrasah Ibtidaiyah (MI) provides basic education based on Islamic principles (Hidayat & Sukitman, 2020; Novitasari et al., 2021). Field data from three Madrasah Ibtidaiyah in Rembang Regency—MI An-Nashriyyah Lasem, MI Al Hassan Pancur, and MI Mansyaul Huda Pamotan—reveals that current supervision practices are primarily inspectional and administrative. Principals have not fully implemented comprehensive supervision, often acting on their initiative, which falls short in addressing subjects that receive little attention and lacks observation and class visits. Additionally, teachers struggle with developing learning materials and maintaining professional performance motivation.

This research aims to develop a collaborative supervision guide for school principals in Rembang Regency. Collaborative supervision fosters a partnership between supervisors and supervisees, creating a conducive environment for objective data collection and problem-solving (Jasmin, 2021). Educational supervision, as described by various scholars, involves principals overseeing and enhancing the teaching process to improve learning quality (Shaifudin, 2020; Amanchukwu et al., 2015; Asf & Mustofa, 2013; Kristiawan et al., 2019). Research by Triastikowatie (2022) on collaborative supervision at SDN 3 Jepun, Tulungagung Regency, demonstrated that teachers benefited professionally from this approach. This study shares the goal of enhancing teacher competence through collaborative supervision. Effective supervision is essential for improving teacher professionalism (Kristiawan et al., 2019), and analyzing supervision practices and their impact on teacher professionalism is crucial (Handayani & Sukirman, 2020). The proposed collaborative supervision guide emphasizes partnership, fostering a supportive environment for data collection and problem-solving (Jasmin, 2021). The objectives of this research are to analyze the need for, plan, and assess the feasibility of a collaborative-based academic supervision guidebook for school principals in Madrasah Ibtidaiyah, Rembang Regency.

METHODOLOGY

This research employs a design and development (Research and Development) methodology to produce specific products and evaluate their effectiveness. According to Borg and Gall, research and development involve "a process used to develop and validate educational products." This study adopts a pragmatic paradigm, which emphasizes actions, situations, and consequences, utilizing an exploratory approach. Creswell and Creswell (2005) describe exploratory qualitative research as a method for exploring and

understanding the meanings individuals or groups assign to social or human problems. This approach involves using open-ended questions and observations.

Sugiyono (2013) defines research and development methods as those used to create specific products and test their effectiveness. Needs analysis, using either survey or qualitative methods, is conducted to develop these products. The effectiveness of the product is then tested using experimental methods to ensure its functionality in broader contexts. This research requires an extended period in the field to build the validity of the research narrative through detailed descriptions of the location and informants.

The research instrument is a closed questionnaire designed to measure data validity and reliability, ensuring the results are both valid and reliable. The questionnaire is structured to have respondents select one answer that best represents their characteristics, marked with a checklist (√). Responses are measured using a Likert scale ranging from 1 to 5, where SS (strongly agree) = 5, S (agree) = 4, N (neutral) = 3, TS (disagree) = 2, and STS (strongly disagree) = 1. This questionnaire format is used to gather expert validation data and analyze teacher needs, with each question offering a yes or no option (Sahertian, 2008). Table 1 provides the expert validation instrument for the supervision activities to be tested.

Table 1. Practitioner Expert Instruments

Aspect	Indicator
Scientific	1. Compliance with objective data
Democracy	2. Suitability of supervision instruments
Comprehensive	3. Planned and systematic
Integrated	4. Communicative
Sustainable	5. Humanist
	6. Conformity with the objectives of academic supervision
	7. Integrated with educational programs
	8. Follow up activities

Researchers utilized observation guidelines to monitor the classroom learning process. These guidelines included a checklist to systematically evaluate teachers' teaching skills, as presented in Table 2 (Sundari, 2020).

Table 2. Observation Guidelines

No	Indicator
1	Questioning skills
2	Explaining skills
3	Skills using variations
4	Skills provide reinforcement
5	Skills for opening and closing lessons
6	Small group and individual teaching skills
7	Class management skills

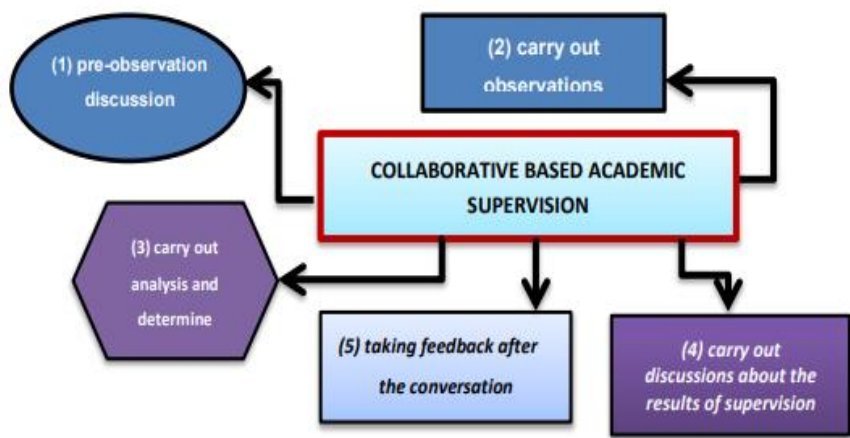
According to Sugiyono (2013), the population comprises objects or subjects with specific qualities and characteristics that the researcher aims to study to draw conclusions. Ocumpaugh et al. (2014) note that collecting all population data creates a cumulative frequency distribution. This study's population included the heads and teachers of 50

Madrasah Ibtidaiyah in Rembang Regency, comprising 2 public and 48 private institutions. The sample, which must be representative of the population, was selected to generalize findings accurately. The research focused on analyzing collaborative-based academic supervision among school principals, the necessity for such supervision guidelines, and the implementation and follow-up of these guidelines in Madrasah Ibtidaiyah in Rembang Regency. The developed model aimed to enhance both technical aspects of teaching and the psychological motivation of teachers through peer-based supervision (Handayani et al., 2021).

Data was collected through interviews, observations, and questionnaires. Interviews were conducted with school principals and teachers from three Madrasahs in Rembang Regency, with observations recorded in field notes from March to April 2023. Additional data came from questionnaires completed by nine respondents, including principals and teachers from the same Madrasahs.

The needs analysis involved semi-structured interviews to identify issues more openly and relaxed than structured interviews. Participants included three school principals and six teachers from MI An-Nashriyyah Lasem, MI Al Hassan Pancur, and MI Mansyaul Huda Pamotan. This analysis informed the development of guidelines for collaborative academic supervision. The collected data from interviews, observations, and questionnaires were analyzed to assess the need for collaborative-based academic supervision guidelines. The findings from this needs analysis were used to create the hypothetical design of the Collaborative-Based Academic Supervision Guide as shows in Figure 1.

Figure 1. Hyphotetic Design



RESULTS AND DISCUSSION

The academic supervision guide developed in this study emphasizes the potential of human resources within the school environment, particularly highlighting the role of the school principal as a partner to the supervised teacher. This guide aims to enhance the learning supervision process, offering a collaborative-based supervision method tailored to the unique needs of Madrasah Ibtidaiyah in Rembang Regency.

Interviews with six teachers from Madrasah Ibtidaiyah in Rembang Regency confirmed the suitability of the collaborative academic supervision method for academic supervision within the region. The feasibility of this method is reflected in its clear objectives, effective implementation techniques, and its capacity to foster self-motivation among supervisors

and teachers. A key aspect of the study was the evaluation of supervision objectives and their success indicators. The results showed that the current implementation of supervision is considered incomplete, with a success rate of 45.10%. This indicates that achieving the objectives of supervision requires more than a single session. Continuous and scheduled learning supervision is essential for reaching optimal outcomes in Rembang Regency.

Table 3 contains data for four items, each assessed for validity using correlation coefficients (rxy) compared to a critical value from the r-table (rtable). Item 1: The correlation coefficient (rxy) is 0.707107, which is greater than the r-table value (0.514). Therefore, Item 1 is considered valid. Item 2: The correlation coefficient (rxy) is 0.945732, which is greater than the r-table value (0.514). Therefore, Item 2 is considered valid. Item 3: The correlation coefficient (rxy) is 0.586556, which is greater than the r-table value (0.514). Therefore, Item 3 is considered valid. Item 4: The correlation coefficient (rxy) is 0.706377, which is greater than the r-table value (0.514). Therefore, Item 4 is considered valid. All four items in the validity test have correlation coefficients (rxy) greater than the critical value (rtable), indicating that each item is valid according to the criteria set forth in this analysis.

Table 3. Validity Test

Item	rxy	rtable	Status
1	0.707107	0.514	Valid
2	0.945732	0.514	Valid
3	0.586556	0.514	Valid
4	0.706377	0.514	Valid

A Cronbach's alpha value of 0.888 indicates a high level of internal consistency for the items in the scale, suggesting that the items measure the same underlying construct and are reliable. Values of Cronbach's alpha range from 0 to 1, with higher values indicating greater reliability. Generally, a value above 0.7 is considered acceptable, above 0.8 is good, and above 0.9 is excellent. Therefore, a value of 0.888 falls into the category of very reliable, as indicated in the Table 4.

Table 4. Cronbach Alpha Reliability Test

Reliability Coefficient	Interpretation
0.888	Very Realible

The central premise of the collaborative supervision model is to create a partnership between supervisors and supervisees, fostering an environment of mutual support and shared objectives. This approach aligns with the findings of Jasmin (2021), who emphasized the importance of a collaborative environment for effective data collection and problem-solving in educational settings. By encouraging principals and teachers to work together, the guide aims to improve the quality of teaching through continuous feedback and professional development opportunities.

In the context of Madrasah Ibtidaiyah in Rembang Regency, the need for such a collaborative approach is evident. Current supervision practices, which are predominantly inspectional and administrative, fail to address the nuanced needs of teachers and the learning process. This is supported by field data indicating that principals often act on their initiative, leading to incomplete supervision that lacks thorough observation and class visits.

Such gaps in the supervision process hinder the overall objective of enhancing teacher performance and student learning outcomes. The introduction of the collaborative supervision guide seeks to address these gaps by providing a structured framework for supervision that is both systematic and comprehensive. As described by Amanchukwu et al. (2015), effective supervision involves not only overseeing but also improving the teaching process. This guide facilitates a more hands-on approach where principals can work closely with teachers, offering targeted support and resources to address specific challenges.

Moreover, the guide emphasizes the importance of continuous and scheduled supervision sessions. Research by Kristiawan et al. (2019) highlights that ongoing supervision is crucial for maintaining teacher motivation and professional growth. The collaborative model promotes regular interactions between supervisors and teachers, ensuring that feedback is timely and actionable.

CONCLUSION

The implications of this study are significant for educational leadership and the enhancement of teaching practices. The collaborative-based academic supervision guide offers a practical and structured approach for principals and teachers to work together in improving teaching quality. By fostering a collaborative environment, this guide enables principals and teachers to engage in shared efforts toward the continuous improvement of instructional methods, which can directly impact student outcomes. The recommendation for widespread implementation of this guide in madrasahs and schools highlights its potential to transform the current supervision system. With the guide's application, schools may become less dependent on external supervisors, fostering a more autonomous and sustainable model of academic supervision. This independence is particularly beneficial for schools in remote or resource-constrained areas, where external supervision may not be regularly available.

Furthermore, the guide's structured approach can serve as a foundational reference for developing other supervision techniques tailored to specific teacher challenges, such as differentiated supervision based on varying levels of teacher proficiency. The continued use of this guide can contribute to a more consistent and comprehensive understanding of the effectiveness of learning supervision practices, thus allowing school leaders to make data-driven decisions for further improvement in teaching and learning processes. Overall, this study emphasizes the importance of empowering school leaders and teachers through collaborative supervision tools, potentially leading to more sustainable improvements in educational quality.

ACKNOWLEDGEMENT

The author extends sincere gratitude to the participants from Madrasah Ibtidaiyah in Rembang Regency for their invaluable contributions. Special thanks are due to the Muria Kudus University.

REFERENCES

- Amanchukwu, R. N., Stanley, G. J., & Ololube, N. P. (2015). A review of leadership theories, principles, and styles and their relevance to educational management. *Management*, 5(1), 6-14. <https://doi.org/10.5923/j.mm.20150501.02>
- Andani, Y. S. B., Yulianto, A., & Murwatiningsih, M. (2017). Model supervisi klinis berbasis teknologi informasi dan komunikasi untuk meningkatkan kinerja guru produktif di SMKN 1 Kota Bima. *Educational Management*, 6(2), 163-169.
- Asf, J., & Mustofa, S. (2013). *Supervisi pendidikan: Terobosan baru dalam peningkatan kinerja pengawas sekolah dan guru*. Yogyakarta: Ar Ruzz Media.
- Creswell, J. W., & Creswell, J. D. (2005). Mixed methods research: Developments, debates, and dilemmas. In *Research in organizations: Foundations and methods of inquiry* (pp. 315-326).
- Hamid, A. (2017). Guru profesional. *Al-Falah: Jurnal Ilmiah Keislaman dan Kemasyarakatan*, 17(2), 274-285. <https://doi.org/10.47732/alfalahjikk.v17i2.26>
- Handayani, L., Madjdi, A. H., & Suad, S. (2021). Pengembangan model supervisi akademik berbasis rekan sejawat di SMP Negeri se-kecamatan Bae Kabupaten Kudus. *Jurnal Studi Guru dan Pembelajaran*, 4(2), 317-334. <https://doi.org/10.30605/jsdp.4.2.2021.1319>
- Handayani, L., & Sukirman, S. (2020). Perbandingan efektivitas pelaksanaan supervisi akademik dan supervisi klinis oleh kepala sekolah dalam meningkatkan profesionalisme guru pada SMP 3 Bae Kudus. *Journal of Education, Psychology and Counseling*, 2(1), 499-512.
- Hidayat, H., & Sukitman, T. (2020). Model pembelajaran pendidikan karakter di MI Tarbiyatus Shibyan Jadung Dungkek Sumenep. *Autentik: Jurnal Pengembangan Pendidikan Dasar*, 4(1), 33-41. <https://doi.org/10.36379/autentik.v4i1.50>
- Irianti, N. (2022). Penerapan supervisi kolaboratif untuk meningkatkan kompetensi profesional guru di SD Negeri 3 Sedayu Kecamatan Turen Kabupaten Malang Semester I Tahun Pelajaran 2020/2021. *Jurnal Terapan Pendidikan Dasar dan Menengah*, 2(1), 23-29. <https://doi.org/10.28926/jtpdm.v2i1.308>
- Jasmin, J. (2021). Penerapan supervisi kolaboratif untuk meningkatkan kompetensi profesional guru dalam mengembangkan bahan ajar. *Syntax Idea*, 3(4), 822-833. <https://doi.org/10.46799/syntax-idea.v3i4.1145>
- Kristiawan, M., Yuniarsih, Y., Fitria, H., & Refika, N. (2019). *Supervisi pendidikan*. Bandung: Alfabeta.
- Novitasari, N., Ismawati, R., & Mazid, S. (2021). Pendidikan bela negara bagi siswa untuk mencegah radikalisme (Di MI Al Iman dan MI Muhammadiyah Terpadu Harapan Kota Magelang). *Abdipraja (Jurnal Pengabdian Kepada Masyarakat)*, 2(2), 164-171.

- Ocumpaugh, J., Baker, R., Gowda, S., Heffernan, N., & Heffernan, C. (2014). Population validity for educational data mining models: A case study in affect detection. *British Journal of Educational Technology*, 45(3), 487-501. <https://doi.org/10.1111/bjet.12156>
- Robinson, J. (2024). Likert scale. In *Encyclopedia of quality of life and well-being research* (pp. 3917-3918). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-17299-1_1654
- Sani, R. A. (2022). *Inovasi pembelajaran*. Bumi Aksara.
- Sari, W. N., Murtono, M., & Ismaya, E. A. (2021). Peran guru dalam meningkatkan motivasi dan minat belajar siswa kelas V SDN Tambahmulyo 1. *Jurnal Inovasi Penelitian*, 1(11), 2255-2262. <https://doi.org/10.47492/jip.v1i11.472>
- Shaifudin, A. (2020). Supervisi pendidikan. *El Wahdah*, 1(2), 37-54. <https://doi.org/10.35888/elwahdah.v1i2.4158>
- Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D*. Bandung: Alfabeta.
- Tanjung, B. N. (2020). Education supervision in increasing competence teachers in curriculum 2013 (study of education management analysis). *Britain International of Linguistics Arts and Education (BloLAE) Journal*, 2(2), 560-566. <https://doi.org/10.33258/biolae.v2i2.267>
- Triastikowatie, E. (2022). Penerapan pendekatan supervisi kolaboratif untuk meningkatkan kompetensi profesional guru di SDN 3 Jepun Kabupaten Tulungagung. *Jurnal Pembelajaran dan Ilmu Pendidikan*, 2(4), 464-474. <https://doi.org/10.28926/jpip.v2i4.583>
- Wahyudi, E., Utaminingsih, S., & Ismaya, E. A. (2022). Efektivitas model supervisi akademik berbasis coaching motirtar. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 11(5), 1396-1406.