ENHANCING EARLY CHILDHOOD ACCREDITATION: INTEGRATING COLLABORATIVE SUPERVISION WITH THE SISPENA APP

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Abstract: *The objective of this research is to provide insights into how collaborative supervision strategies, supported by the SISPENA application, address accreditation challenges and enhance educational excellence in TAAM institutions. Accreditation is crucial for Early Childhood Education (PAUD) institutions as it certifies the quality of education and services, ensuring that these institutions meet essential standards for the developmental needs of children. This study employs a qualitative approach with a case study method. Data is collected through in-depth interviews with educators, supervisors, and administrators from participating TAAM institutions, participant observation, and document analysis. Data analysis employs triangulation to gain insights into the challenges faced in meeting accreditation criteria and the impact of collaborative supervision strategies in overcoming these challenges. The findings highlight that the integration of the SISPENA application plays a crucial role in providing technological support and a platform for efficient documentation. Most importantly, this research reveals that this collaborative method, supported by technology, results in significant improvements in the accreditation process in the seven participating TAAM institutions. These measurable advancements indicate a substantial enhancement in accreditation outcomes. The research underscores the importance of collaborative strategies and technology integration in improving early childhood*

education standards, as evidenced by the enhanced accreditation status, which is crucial for the credibility and quality assurance of PAUD institutions.

A. Introduction

Early childhood educators' supervision programs are essential for fostering professional growth and enhancing the quality of early childhood education. By providing supportive mentoring, encouraging reflective practice, and offering professional development opportunities, these supervision programs contribute to improved teaching practices and better outcomes for young learners (Bose Oke, 2016; Hakim et al., 2021; Hartono, 2019; Singerin, 2021).

Educational supervision is guidance in the form of direction aimed at enhancing the educational environment and enhancing the quality of education (Hartono, 2019; Mustari, 2022; Safinatun Najah, 2021). In the context of quality development, supervision is an endeavor by supervisors to provide guidance to each ECCE and community education unit to attain national education standards. This supervision is included in the form of institutional supervision that pertains to the subject of observation so that supervisors can concentrate on aspects of the attainment of National Education Standards indicators in educational units. The implementation of educational supervision in early childhood education units and community education has the following goals: 1) Changes in quality indicators in eight national education standards (SNP) that have not been met; 2) enhancing the competence of educators and education personnel in the implementation of learning and management of ECCE education units and community education; and 3) enhancing the quality and practicability of each ECCE unit's ability to implement learning and management (Pranita et al., 2019; Safinatun Najah, 2021; Sari & Huzairin, 2021).

The increasing weight of the duties and responsibilities of school administrators reflects the significance of their

positions. The government has made various efforts to improve the competence and professionalism of early childhood school supervisors, including intensifying the implementation of Technical Guidance, seminars, and other training activities designed to increase their capacity. Supervision is a process and strategy designed to assist teachers and supervisors in learning and comprehending their daily tasks at school so that they can use their knowledge and skills to provide better services to parents and schools as a more effective learning community (Bose Oke, 2016; Safinatun Najah, 2021; Sari & Huzairin, 2021).

ECCE Supervisors must devise plans to enhance the implementation of the four teacher competencies: pedagogical competence, personal competence, social competence, and professional competence (Azian, 2022; Hakim et al., 2021; Rukanda & Nurhayati, 2023). Therefore, ECCE supervisors must have a vision and mission for supervision that can be incorporated into their objectives and achievement strategies. The lack of efficacy in the implementation of supervision thus far is due to the supervisors' lack of clarity regarding the vision and mission of supervision (Hartono, 2019; Pranita et al., 2019). As surrogate objects, teachers and principals have never been involved in the development of supervision programs. Also, the implementation of supervision appears to be carried out without regard to the requirements of instructors.

To address these issues, a model of collaborative supervision is required. Collaborative supervision is the process by which individuals with disparate skill sets collaborate on an equal footing and with the same level of dedication to achieve a common objective (Prasetia et al., 2022; Shandi, 2023; Wiyono et al., 2021). This supervision model distinguishes itself from other supervision models by emphasizing a group-based approach to supervision discussions. Supervisors who employ this model encourage teachers to assist and support one another in enhancing instructional practices in the classroom. Important to the successful implementation of this collaborative supervision model is the ability of supervisors to facilitate and coordinate the activities of instructors (Mutahajar, 2019; Wiyono et al., 2021).

By optimizing their performance with technology, school managers and supervisors can carry out their primary responsibilities and functions effectively, which will have an impact on enhancing teacher professionalism (Rangkuti et al., 2021). According to the previous research, the ineffectiveness of the implementation of the supervision method is due to a lack of use of information technology and digitalization, as well as a failure to include teachers and principals as foster objects in the preparation of supervision programs (Fahmi et al., 2018; Karandeeva, 2021). So it has not improved the professional competence of teachers and the management skills of school principals, which ultimately means that accreditation as a means of measuring the level of eligibility of education units has not been achieved, meaning that the professional level of school administrators is still not optimal.

Observably, the supervisors' supervision activities have had no impact on the development of the professional skills of principals and instructors. In their activities, there has been no indication of a heightened understanding of administration, management, and educational leadership. The application Sispena is one of the platforms available to administrators. The SisPenA PAUD PNF application is a web-based accreditation evaluation application that can be accessed anywhere, at any time, with an internet connection. This application is accessible not only from a laptop or desktop computer but also from mobile devices or tablets with lower resolutions. To access or use the SisPenA application, activate a web browser and enter suspend.banpaudpnf.or.id in the address bar.

The presence of a school supervisor is more of a routine check to ensure that school administration, teachers' implementation of routine activities, and the school's physical condition adhere to standardized guidelines. If it is inadequate or not by standard guidelines, the Supervisor will provide the principal with suggestions for improvement. As one of the motivations for teachers to be creative and extremely creative in creating a pleasant learning environment, administrators have not provided serious coaching and guidance to each teacher. Every educator faces unique challenges when

interacting with students (Marsegi et al., 2023; Musa et al., 2022; Nurhayati & Rakhman, 2017; Suharyat et al., 2022; Winarti et al., 2022). Therefore, supervisors must be able to carry out their primary responsibilities and functions, including coaching, supervision, and assessment, as well as providing teachers with guidance and training(Mustari, 2022). These four actions, if taken earnestly and consistently, will increase teacher competence and improve student learning outcomes, thereby enhancing the quality of education in the form of acceptable accreditation values.

Researchers also observe that the level of teacher professionalism at TAAM is not optimal, as demonstrated by a lack of teacher creativity in employing a variety of learning methods that can increase the student's interest in learning. For instructors and heads of education units to carry out their responsibilities in schools, they must receive constant technical support(Nurmalina, 2017; Suharyat et al., 2023). According to previous research, many Education Units require assistance and ongoing supervision of Information Technology (IT), digitalization, and the teacher's role (Nurhayati, 2021; Suharyat et al., 2022; Winarti et al., 2022).

This study aims to fill these gaps by investigating the efficacy of the SUPDIASI (Supervision, Discussion, and Action) pattern, integrated with the SISPENA 3.1 application, in improving the quality of educational services and accreditation in Batujajar District, West Bandung Regency. The integration of this pattern with technological tools like SISPENA is expected to enhance the supervision process, thereby improving the professional skills of educators and administrators in TAAM institutions.

The objective is to analyze the process and assess the impact of this integrated supervision pattern on the quality of education and accreditation outcomes. By focusing on this innovative approach, the research contributes to a deeper understanding of how technology and collaborative strategies can enhance the effectiveness of educational supervision in early childhood settings.

B. Method

The chosen research design for this study is descriptive qualitative research. This approach enables a thorough exploration of the collaborative supervision strategy integrated with the SISPENA application and its implications for enhancing early childhood institution accreditation. By delving into the intricate details of this integration, the study aims to provide a comprehensive understanding of the phenomenon. The study takes place within the confines of Batujajar District in West Bandung Regency, located in the West Java Province. This location is of relevance as it houses seven TAAM (Muslim Child Care Park) institutions. By concentrating on this specific setting, the research can closely examine the practical implementation of the collaborative supervision strategy and the utilization of the SISPENA application within the context of early childhood education.

The participants enlisted for this research encompass a diverse range of stakeholders hailing from the seven TAAM institutions. Among these stakeholders are early childhood educators, administrators, accreditation coordinators, and other pertinent staff members who are actively engaged in the execution of the collaborative supervision strategy and the utilization of the SISPENA application. The selection of participants is methodically carried out to ensure a representative cross-section of roles and experiences within the institutions. To amass rich qualitative data, the research employs semi-structured interviews. These interviews follow a carefully designed set of open-ended questions, allowing participants the freedom to share their personal experiences, perspectives, obstacles, and advantages related to the integration of the collaborative supervision strategy and the SISPENA application. This approach not only maintains a consistent focus but also permits the exploration of unforeseen themes that may emerge.

In tandem with interviews, the research incorporates document analysis. This entails a thorough review and assessment of pertinent documents such as institutional reports, accreditation records, training materials, and various communications linked to the collaborative supervision strategy and the SISPENA application. By utilizing this method, the

research gains contextual insight and corroborates findings, reinforcing the overall credibility of the study.

Thematic analysis constitutes the core approach for identifying patterns and themes within the qualitative data. Through careful transcription of interview responses and examination of document content, recurring themes concerning the integration of the collaborative supervision strategy and the SISPENA application are identified. These themes play a pivotal role in comprehending the central aspects, challenges, and benefits associated with the integration.

The subsequent step involves coding and categorization. Codes, which are succinct representations of concepts, emerge through an inductive process that allows patterns to surface organically from the data. These codes are then grouped into categories based on their interrelationships, thus structuring the data and facilitating a deeper level of analysis. Codes emerge inductively, capturing key concepts and themes related to the collaborative supervision strategy and the SISPENA application. These codes are then categorized based on their relationships to develop a coherent analysis. The research employs triangulation, cross-verifying data from interviews, documents, and participant observations to ensure validity. This multi-source approach strengthens the credibility of the findings.

The study strictly adheres to ethical guidelines, ensuring participant confidentiality and informed consent. Participants are informed of the study's purpose, their voluntary participation, and the confidentiality of their responses. Any identifiable information is anonymized in the research findings. To mitigate potential biases, the research involves reflective practices, where researchers continuously examine their assumptions and preconceptions. Peer debriefing sessions are also conducted to challenge and refine the analysis process.

In essence, this meticulous research methodology strives to gather, dissect, and interpret qualitative data, thereby offering valuable insights into the implications of integrating the collaborative supervision strategy with the SISPENA application in the context of improving early childhood institution accreditation within the chosen research setting.

C. Result and Discussion

A. Overview of TAAM Institutions in Batujajar District

"TAAM" refers to the abbreviation of "Taman Asuh Anak Muslim" (Muslim Child Care Park), which functions under the supervision of BKPRMI (Indonesian Mosque Youth and Adolescent Communication Body) and Disdik (Department of Education). The main objective of this institution is to facilitate the holistic development of children between the ages of 0 and 6, particularly those whose parents are unable to provide adequate care and attention due to professional obligations. The institution places a strong emphasis on cultivating virtuous and noble values within these youngsters. The objective is to enhance their psychological, emotional, and social maturation and advancement. Therefore, TAAM serves as an exemplar of Early Childhood Education (PAUD) that is based on the integration of Islamic principles in the upbringing of young children. In a more expansive context, TAAM can be categorized within the domain of SPS (Pos PAUD).

The philosophical underpinnings of TAAM are rooted in two fundamental principles: a) The Basic Concepts of Qur'anic Thought (KDPQ), and b) The Self-Concept of the Prophet Muhammad (KDPR). The objective of TAAM is to enhance the presence and influence of the Indonesian Mosque Youth and Adolescent Communication Body (BKPRMI) by utilizing the Family Formation and Development Institution (LPPKS) to promote virtuous actions in the realm of Early Childhood Education (PAUD). achieve progress in learning activities at school. One of the duties of the supervisor is to carry out educational supervision. To carry out academic supervision effectively, it requires conceptual, interpersonal, and technical skills in digitalization.

B. Current State of TAAMs' Accreditation

In the Batujajar District of West Bandung Regency, located in the West Java Province, there exists a collective of seven institutions known as "TAAM" (Taman Asuh Anak Muslim) or Muslim Child Care Park. However, out of all these institutions when this research was conducted in 2022, only one possessed the Administrative Competence required for all eight educational criteria. Furthermore, regarding accreditation, it is worth

noting that only a single institution has undergone the rigorous procedure of accreditation. Challenges were highlighted, such as limited resources and inconsistencies in meeting accreditation criteria. This variation provided a clear rationale for exploring the integration of the collaborative supervision strategy with the SISPENA application to bolster accreditation efforts.

C. Description of Collaborative Supervision Strategy

From the empirical data, it can be inferred that the integration of collaborative supervision strategies with the SISPENA application emerged to streamline and directly address discussions regarding the specific questions related to the administration of the eight required educational standards within each educational unit. This integration aims to align these discussions with the questions presented in the Sispena 3.1 application. This strategic approach is especially relevant in the context of facing the assessment for the accreditation of PAUD educational units. Moreover, this integration aims to explore the insights from prior articles that highlight the lack of supervision tied to IT-based digitalization(Karandeeva, 2021; Shandi, 2023), emphasizing the need for assistance and follow-up, up to the completion of the SISPENA application.

From the interview results with the supervisor and TAAMs' principals it can be inferred that several additional ideas underpin the concepts of collaborative strategy supervision integrated with the SISPENA Application: a) The origin of this concept is rooted in the observation that many supervisors continue to rely on conventional supervision models, leading to a focus primarily on the supervisor's expertise; b) The concept arises from the realization that numerous supervisors and inspectors have yet to embrace the application of Information Technology (IT) or digitalization within their supervisory practice; c) The emergence of this concept is attributed to the observation that the outcomes of supervisory activities often lack follow-through to align with the expected quality assessment outlined by the government through the accreditation process.

These ideas collectively underscore the rationale behind integrating collaborative supervision strategies with the SISPENA application. The initiative seeks to overcome the limitations of conventional supervisory practices and bridge the gap in applying modern technological tools. By doing so, it aims to

address the challenges in translating supervisory insights into tangible improvements in educational quality, as outlined by accreditation standards set by governing bodies. The integration of these strategies not only offers a practical solution but also aligns with the evolving landscape of education, emphasizing the role of digitalization and collaborative approaches in achieving educational excellence (Bianchetti, 2021; Musa et al., 2020; Nurhayati et al., 2023; Suharyat et al., 2022; Winarti et al., 2022).

The empirical data also highlighted the principal aims and projected outcomes linked to the integration of the collaborative supervision strategy within the realm of early childhood education, with a specific focus on TAAM institutions situated in the Batujajar District. The core objective revolves around elevating educational quality by addressing the stipulated eight educational standards pertinent to PAUD institutions. Additionally, this strategy is strategically poised to yield substantial contributions, both to the governmental bodies and the institutions themselves, by fostering an increase in the count of accredited establishments within the broader Bandung Barat vicinity. This overarching aspiration manifests through the pursuit of two critical facets.

First, the strategy strives to instill a comprehensive grasp and effective implementation of the educational standards. It aims to ensure that educational institutions, particularly TAAM entities, attain an in-depth comprehension of the documentation intricacies tied to the eight educational standards. This encompasses a nuanced understanding of administrative requisites and the adoption of appropriate methodologies for achieving each distinct standard. This comprehensive knowledge acquisition plays an instrumental role in elevating the overall quality of the early childhood education dispensed(Irawan et al., 2020; Muis, 2022).

Second, the strategy's implementation is intricately intertwined with the enhancement of accreditation outcomes and educational excellence (Irawan et al., 2020; Musa et al., 2020). By instilling accuracy and diligence in documentation practices and by nurturing the application of effective teaching methodologies, the strategy actively contributes to the overall improvement of the educational quality facilitated by TAAM institutions. The findings underscore this success through empirical evidence: all six TAAM institutions subjected to the collaborative strategy showcased

tangible progress. These institutions proactively engaged in the accreditation process during both the initial and mid-2023 evaluation phases, underscoring the tangible and positive impact of the employed approach.

Specific roles and responsibilities of educators, supervisors, and administrators within the collaborative supervision strategy integrated with the SISPENA application are also highlighted from the empirical data. Educators play a vital role in identifying and discussing common issues arising within the educational units. For instance, they engage in discussions regarding compliance with the eight educational standards. One example cited was the challenge of accurately filling in data related to children's physical measurements without providing accompanying analysis, such as cases of macrocephaly or microcephaly. Educators are also responsible for implementing effective teaching methods through interactive activities like play, singing, storytelling, and educational games.

Supervisors assume distinct responsibilities in the collaborative process. They begin by evaluating administrative document checklists to gauge the extent to which educational units possess the required documentation. During discussions, supervisors facilitate and guide conversations, addressing frequently occurring issues tied to administrative shortcomings across the eight standards. Furthermore, supervisors oversee the process of completing the PPA (Prerequisite Accreditation Assessment) in the Sispena application to ensure readiness for accreditation evaluation.

Administrators are tasked with collecting, completing, and uploading the improved administrative documentation for the eight educational standards discussed during collaborative sessions into the Sispena 3.1 application. Additionally, administrators have roles such as operating computers and ensuring internet connectivity for accessing the SISPENA application.

The collaborative supervision strategy involves educators, supervisors, and administrators working in tandem to foster effective educational practices and ensure administrative compliance. This is in line with previous research stating that the implementation of technology-based academic supervision, informatics, and communication should be reinforced (Maryanto

et al., 2023). The findings also underscore the importance of educator engagement in discussing and comprehending the standards, from standard operating procedures to assessment processes. Educators play a hands-on role in implementing engaging teaching methods and creating innovative teaching aids using natural or readily available materials (Ghofur & Nurhayati, 2023; Gondiawati & Nurhayati, 2024; Kartinih et al., 2018; Marliana et al., 2021; Octaviani et al., 2023; Patimah & Nurhayati, 2023; Rachmah et al., 2021; Rosita et al., 2020; Yosfiani & Nurhayati, 2023).

Supervisors, on the other hand, guide the collaborative discussions and stimulate insightful inquiries to address administrative gaps, while administrators manage document compilation and upload, ensuring the integrated strategy functions smoothly. This cooperative and collaborative supervision approach leads to a holistic enhancement of early childhood education practices and administrative efficiency, ultimately contributing to improved accreditation outcomes (Mutahajar, 2019; Shandi, 2023; Singerin, 2021; Suwardi et al., 2020).

D. Exploration of SISPENA Application Integration

Empirical data elucidated the collaborative supervision process facilitated through the utilization of the SISPENA application. In this approach, each TAAM unit is allowed to elucidate the challenges encountered with the documentation corresponding to the eight educational standards, as prescribed by SISPENA. Subsequently, these challenges are collectively discussed and deliberated upon among various TAAM educational units. The aim is to arrive at effective solutions collaboratively. Once resolved, the pertinent documents are uploaded to the SISPENA platform. This upload process is instrumental in initiating the assessment, indicated by a change in the color of the upload feature from its initial state to a green hue. Supervisors and inspectors then monitor the uploaded documents, using the NPSN (National School Identification Number) password to log in to SISPENA, forming the basis for feedback.

The principal features and functionalities of the SISPENA application embedded within this strategy are as follows:

First, Dashboard Feature. This feature serves as a gateway to synchronize the data of educational units by entering their

respective NPSNs. It facilitates the synchronization of essential institutional details such as the institution's profile, among others. Second, the Video Tutorial Feature. Designed to guide users through the application's operations, this feature provides step-by-step video tutorials on how to fill in the eight ECCE educational standards within the SISPENA application. Third, Input the PPA Feature. A pivotal feature of the strategy, this element provides the platform for users to input and upload tangible evidence for each of the eight educational standards:

1. Standard for Attainment of Child Development and Growth Levels
2. Content Standard
3. Educator and Educational Personnel Standard
4. Infrastructure Standard
5. Management Standard
6. Funding Standard
7. Assessment Standard

In essence, the research findings underscore the intricacies of the collaborative supervision approach through SISPENA integration. The method engages TAAM units in a collective problem-solving process, leveraging discussions and shared insights to resolve documentation challenges. The SISPENA application forms the backbone of this strategy, offering features like a dashboard for institution synchronization, video tutorials for guidance, and an input platform for evidentiary documentation. This integrated approach exemplifies how technology and collaborative efforts synergistically contribute to enhancing educational standards and ultimately accreditation outcomes (Maryanto et al., 2023).

E. Benefits and Challenges of Integration

The collaborative supervision strategy, a central focus of this study, has been successfully implemented within the TAAM institutions of Batujajar District. This strategy is marked by the cooperation and partnership among various TAAM units. It emphasizes the significance of group discussions in achieving compliance with the eight national standards for early childhood education, as well as enhancing teaching practices during the process of instruction (Shandi, 2023; Sulhawati, 2021).

Interview results from participating educators, administrators, and accreditation coordinators shed light on the intricacies and benefits of this collaborative approach. One respondent, from Taam Al – Al- Muhajirin, shared that "the collaborative approach has provided us with problem-solving solutions generated through collective thinking." This statement underscores the effectiveness of the strategy in fostering innovative solutions through collaborative discussions, exemplifying its capacity to address challenges and drive improvements (Handayani et al., 2021; Hartono, 2019; Moewardi et al., 2020).

Moreover, the strategy's influence extends to comprehensive documentation. According to the interviewees, the discussions led to a thorough understanding and fulfillment of administrative requirements linked to the eight standards. Consequently, the outcomes of these deliberations are directly integrated into the Sispena 3.1 application. This integration serves the overarching purpose of achieving the desired accreditation scores for each TAAM institution, collaborative supervision, and underscoring the strategy's practical and outcome-driven nature (Irawan et al., 2020).

The integration of technology through the SISPENA application has brought about significant positive changes in the overall efficiency and effectiveness of the supervision process. This innovative approach has redefined the way challenges are addressed, prioritizing collaborative efforts, group dynamics, and peer-based learning. It seamlessly incorporates practices like curriculum development and action research, which are integrated into the SISPENA application for precise and timely execution. This stands in stark contrast to conventional methods characterized by authoritarianism and hierarchical practices that often focus on fault-finding without subsequent comprehensive improvement.

The research findings highlighted the transformative power of merging technology with the collaborative supervision strategy, as facilitated by the SISPENA application as beneficial. The array of benefits, including enhanced collaboration, knowledge sharing, IT proficiency, and streamlined accreditation, demonstrates how this integrated approach transcends the limitations of traditional methods. By aligning

with the eight educational standards, this strategy propels educational institutions towards comprehensive and timely improvements that positively impact overall quality. This is in line with previous researches that recommend the use of ICT in the supervision application (Fatimah, 2022; Maryanto et al., 2023).

The findings shed light on the challenges and obstacles encountered during the implementation of the collaborative supervision strategy in conjunction with the SISPENA application. One of the key challenges identified is that not all educators within the educational units with complete documentation are equally adept at sharing their information with other units. To address this challenge, the solution lies in a collective approach. Collaborative discussions among educators are essential to identify the issues hindering information sharing. Furthermore, seeking additional reference solutions through resources like quality mapping guides for educators from LPMP (Local Education Development Center) and online platforms like Google or YouTube is recommended. These resources can offer insights and perspectives to augment the problem-solving process.

Another significant challenge noted is the apprehension or limited grasp of Information Technology and Digitalization, particularly when using the SISPENA 3.1 application. The proposed solution involves collaborating with skilled operators within the educational units who possess the proficiency to operate computers and navigate digital platforms effectively. These operators can act as facilitators, aiding their colleagues in overcoming the technological hurdles associated with the application.

In essence, the research findings underscore that the process of integrating the collaborative supervision strategy with the SISPENA application is not without challenges. However, these challenges present opportunities for improvement and growth. The approach of fostering collaboration and seeking reference solutions, combined with the involvement of proficient operators, forms a well-rounded strategy to tackle the challenges faced during integration. The findings indicate that addressing these challenges through collective problem-solving and technological support can enhance the effectiveness of the strategy, ultimately

leading to improved educational standards and accreditation outcomes (Irawan et al., 2020; Malik & Sumarno, 2016; Musa et al., 2022; Suharti, 2021).

D. Conclusion

This study has provided valuable insights into the implementation of a collaborative supervision strategy, augmented by the SISPENA application, in the TAAM institutions of Batujajar District. The research highlights the pivotal role of this integration in enhancing the quality of early childhood education and streamlining accreditation processes.

Key outcomes include the successful navigation of accreditation challenges through improved collaboration among educators, supervisors, and administrators. This strategy, supported by the technological features of the SISPENA application, has led to tangible improvements in accreditation status across six of the seven TAAM institutions. The study demonstrates how blending collaborative efforts with technology can lead to significant advancements in educational quality.

Despite these successes, the study acknowledges certain limitations. The focus on a single district limits the generalizability of the findings. Additionally, varying levels of technological proficiency among educators and limited resources were challenges that could affect the strategy's effectiveness in different contexts.

Future research should explore the scalability of the collaborative supervision strategy and SISPENA application in other districts and regions. Investigations into how different cultural and infrastructural contexts impact the effectiveness of such strategies would be valuable. Moreover, further studies could examine long-term impacts on educational quality and explore how these strategies can be adapted to varying educational environments. In essence, the findings from Batujajar District offer a promising model for enhancing early childhood education quality and accreditation processes. This model has the potential to be adapted and implemented in diverse educational settings, providing a roadmap for educators and policymakers aiming to improve early childhood education standards globally.

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