

# Implementation of The Professional School Principal Selection Information System at The Bandung City Educational Office

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## ABSTRACT

School principal selection is a critical process to ensure educational quality through competent leadership. The Bandung City Education Office initiated the Professional School Principal Selection Information System (SIKASEP) as an online innovation to manage the administrative registration process from candidate training. This article aims to describe the implementation of the SIKASEP application, identify emerging obstacles, and outline resolution efforts. The method used was field observation and active participation during 30 days in the Secretariat Division. Results show that the SIKASEP application facilitated selection for 520 applicants across Kindergarten, Elementary, and Junior High levels. However, technical constraints were found, such as document upload failures due to low digital literacy, incorrect document placement, and network issues. Mitigation efforts included continuous socialization for teachers and periodic system updates to improve user-friendliness. This implementation successfully created a more organized and transparent selection process compared to the previous manual system.

**Keywords:** Principal Selection, Information System, Educational Administration.

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## 1. INTRODUCTION

The urgency of implementing digital systems in public institutions is fundamentally driven by the need to enhance service quality and user satisfaction. Despite previous scholars' notes about the importance of public officers and their motivational base (Agustina et al., 2021; Dharmanegara et al., 2021; Taufiq & Harijanto, 2023), much of the literature suggests that the success of an information system is heavily contingent upon the quality of the system itself and the information it generates, which collectively foster user satisfaction and trust (Agustina et al., 2023; Alsulami & Hashim, 2018; Kawidjaya et al., 2023; Taufiq, 2023). In the context of government agencies, the integration of E-Government is no longer just a trend but a strategic necessity to ensure that public services are delivered efficiently and transparently. Factors such as advanced information technology infrastructure and competent human resources are significant predictors of successful E-Government implementation, as they directly influence the agency's ability to fulfill its main duties and functions (Karunia et al., 2023). Furthermore, the effectiveness of any digital platform—whether in the banking sector, utility management, or educational administration—is deeply rooted in how well the technology is accepted and utilized by its end-users. For instance, the adoption of mobile-based systems relies heavily on perceived

ease of use and perceived usefulness, which determine the user's ultimate acceptance of the technology (Syawali et al., 2023). This principle of technological reliance is also evident in organizational settings where specific systems are designed to support customer or constituent management, proving that a well-structured system can significantly optimize institutional performance (Andikaputra et al., 2022). Therefore, the implementation of SIKASEP at the Bandung City Education Office serves as a critical intervention to align regional educational management with these global digital standards, ensuring that the selection of school leaders is supported by a reliable and user-centric digital ecosystem.

The quality of an educational institution is fundamentally driven by the competence and visionary leadership of its school principal. In the Indonesian context, the strategic role of a school principal has been further emphasized by the issuance of the Minister of Education, Culture, Research, and Technology Regulation Number 40 of 2021. This regulation mandates a more rigorous and merit-based selection process, requiring candidates to possess specific certifications such as the "Guru Penggerak" (Motivator Teacher) credential. Consequently, the Bandung City Education Office, as the regional authority overseeing educational affairs, faces the immense task of managing a large-scale, high-stakes selection process that must remain objective, accountable, and efficient.

While school principals play a vital role in improving the quality of education through innovative and professional leadership. Previously, the collection of administrative documents was conducted manually (hardcopy), leading to document accumulation and administrative disorder due to limited human resources. In response to these challenges, the Bandung City Education Office launched the SIKASEP application in 2018 as an online registration portal and selection innovation. This application was expected to facilitate potential teachers in efficiently uploading required documents. However, in practice, effectiveness remains hindered by the limited technological capabilities of the users.

However, the transition from traditional to modern administrative practices often encounters significant hurdles. Historically, the selection process relied on manual document submissions, which frequently resulted in massive paperwork accumulation, data redundancy, and a higher risk of human error during the verification phase. Such manual systems are no longer sustainable given the high volume of applicants and the need for rapid data processing. The implementation of the Professional School Principal Selection Information System (SIKASEP) represents a crucial digital transformation effort to bridge this gap. This community service initiative is vital because it addresses the "last mile" of technology adoption—ensuring that the digital infrastructure provided by the government can be effectively utilized by the educators it is intended for.

The primary objective of this activity is to facilitate a seamless transition for prospective school principal candidates into the digital ecosystem. By providing technical assistance and monitoring the implementation of the SIKASEP application, this program aims to ensure that no qualified candidate is disqualified due to technical illiteracy or system misunderstandings. Furthermore, this initiative seeks to identify systemic bottlenecks in the current selection flow to provide evidence-based recommendations for future system enhancements. Ultimately, the goal is to foster a more transparent and professional recruitment climate within the Bandung City Education Office, ensuring that the selection of school leaders is based purely on merit and administrative compliance rather than being hindered by logistical complexities.

## **2. METHODS**

The execution of this community involvement activity was structured through a systematic program conducted at the Bandung City Education Office. The program spanned a duration of 30 working days, specifically from June 15 to July 15, 2022. During this period, the implementation team was integrated into the Secretariat Division, particularly within the Sub-Section of Programs, Data, and Information. This placement was strategically chosen to allow direct access to the digital infrastructure of the SIKASEP application and to ensure close coordination with the administrative staff responsible for the principal selection process. The initial phase of the

methodology involved an intensive observation and system orientation period. This stage was crucial for understanding the technical architecture and the end-to-end workflow of the SIKASEP portal, starting from the account creation by school operators to the final announcement of successful candidates. By conducting a thorough system walkthrough, the team was able to identify potential friction points where applicants might struggle, such as the document upload interface and the validation criteria for various administrative requirements. This observational data served as the foundation for the subsequent technical assistance activities. Following the orientation, the methodology moved into the participatory action phase, where the team actively assisted in the monitoring and verification of applicant data. During this stage, the team worked alongside the Education Office staff to review the digital dossiers submitted by over 500 candidates. This hands-on involvement allowed for a real-time assessment of common user errors, such as incorrectly formatted files or documents uploaded to the wrong administrative categories. This phase was not merely administrative but served as a diagnostic process to gather qualitative data on the challenges faced by educators when interacting with the government's digital platform. The fourth stage of the implementation focused on direct facilitation and technical socialization for the prospective principal candidates. Recognizing the gap in digital literacy among some senior educators, the team provided guided assistance to simplify the technical jargon of the application. This was conducted through a series of socialization sessions and the creation of simplified instructional materials designed to walk users through the submission process. The approach was centered on user-centric facilitation, ensuring that the technology acted as an enabler rather than a barrier to the candidates' professional advancement. The final phase of the method was a comprehensive evaluation and reporting stage. This involved participating in internal coordination meetings with the Head of the Sub-Section and other relevant stakeholders to discuss the findings from the field. The team synthesized the data regarding system glitches, user complaints, and the overall passing rate of the administrative phase into a structured report. This evaluative process was essential to provide the Bandung City Education Office with actionable insights and strategic recommendations for the future refinement of the SIKASEP application, ensuring the long-term sustainability of the digital selection model.

### **3. RESULTS AND DISCUSSION**

#### **3.1. SIKASEP Implementation Process**

The implementation of the Professional School Principal Selection Information System (SIKASEP) by the Bandung City Education Office represents a significant leap toward digital governance in educational human resource management. SIKASEP serves as a centralized digital repository for administrative data, specifically designed to facilitate the selection of school principals. The system is accessible to the public, allowing teachers recommended by their respective school units to register independently. For those who have yet to receive a formal recommendation, the system provides a pathway through a professional consideration team. This digital approach ensures that the recruitment process is not only more controlled but also highly transparent, aligning with the theoretical framework of selection as a decisive series of steps to match applicants with specific organizational qualifications.

The recruitment workflow within SIKASEP is meticulously structured to ensure that only the most competent candidates advance. The process begins with an open registration phase where candidates, including those holding the "Guru Penggerak" (Motivator Teacher) certificate, upload ten essential administrative documents through accounts created by school operators. Data from the 2021/2022 period showed a high level of enthusiasm, with 520 applicants from Kindergarten, Elementary, and Junior High School levels. The administrative selection phase, conducted by the Program and Educator Development Division, utilized the system to verify these documents online. Out of the total applicants, 518 candidates successfully passed this initial screening, demonstrating the system's efficiency in handling large-scale administrative verification while allowing for policy-based flexibility regarding specific certifications.



Figure 1. SIKASEP Admission Procedures

Following the administrative phase, the selection process moved into rigorous competency testing. Phase 1 involved a Psychological Test (Psikotes) conducted by an independent team to assess the candidates' attitudes, personalities, interests, and intelligence. This phase was crucial in determining the psychological readiness of a candidate to hold a leadership position. The results, announced transparently via the SIKASEP portal, saw 264 candidates qualifying for the next round. This transition from 518 to 264 participants highlights the selective nature of the system, ensuring that the pool of potential leaders is narrowed down to those with the appropriate psychological profile for school management.

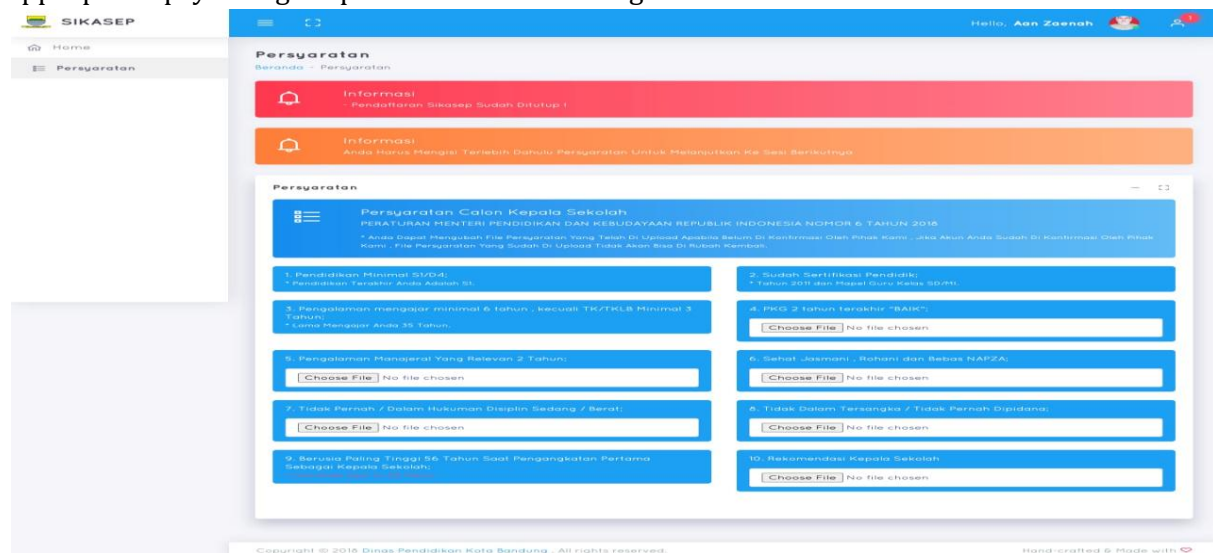
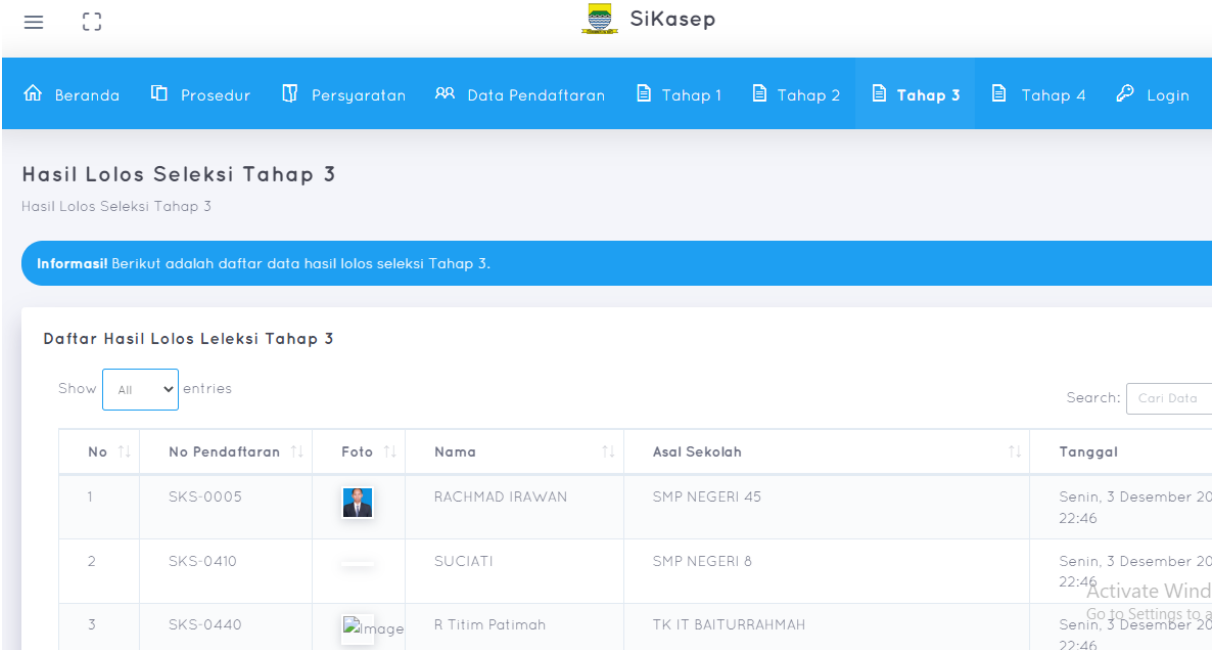


Figure 2. SIKASEP Requirements Upload Feature

The evaluation continued with Phase 2, which utilized a Computer-Assisted Test (CAT) to establish a baseline for basic competencies. This objective, software-based assessment is vital for upholding the standards of professionalism required of a school principal. Subsequently, Phase 3 involved a Performance Assessment, where candidates were required to demonstrate deep knowledge and practical skills through various tasks and situational simulations. The digital tracking of these results showed a significant filtering effect; only 210 candidates passed the CAT, and the number further narrowed to 82 candidates following the Performance Assessment. This multi-layered testing regime ensures that candidates are evaluated both on theoretical knowledge and practical application before moving to the final substance interview.

The final stage of the selection process involved a Substance Interview aimed at measuring the candidates' readiness and specific field expertise. After successfully navigating all testing phases, the qualified candidates were enrolled in a three-month training program at the Institute for the Development and Empowerment of School Principals (LP2KS). This training utilized a Combined Online Mode (Darkom) consisting of four critical stages: On-the-Job Training (OJT 1 & 2) and In-Service Training (IST 1 & 2). This comprehensive curriculum covered technical explanations, character building, managerial skills, and the implementation of leadership projects (RPK). This pedagogical approach ensures that candidates do not just pass a test but are actively molded into visionary leaders through 300 total hours of instructional activities.



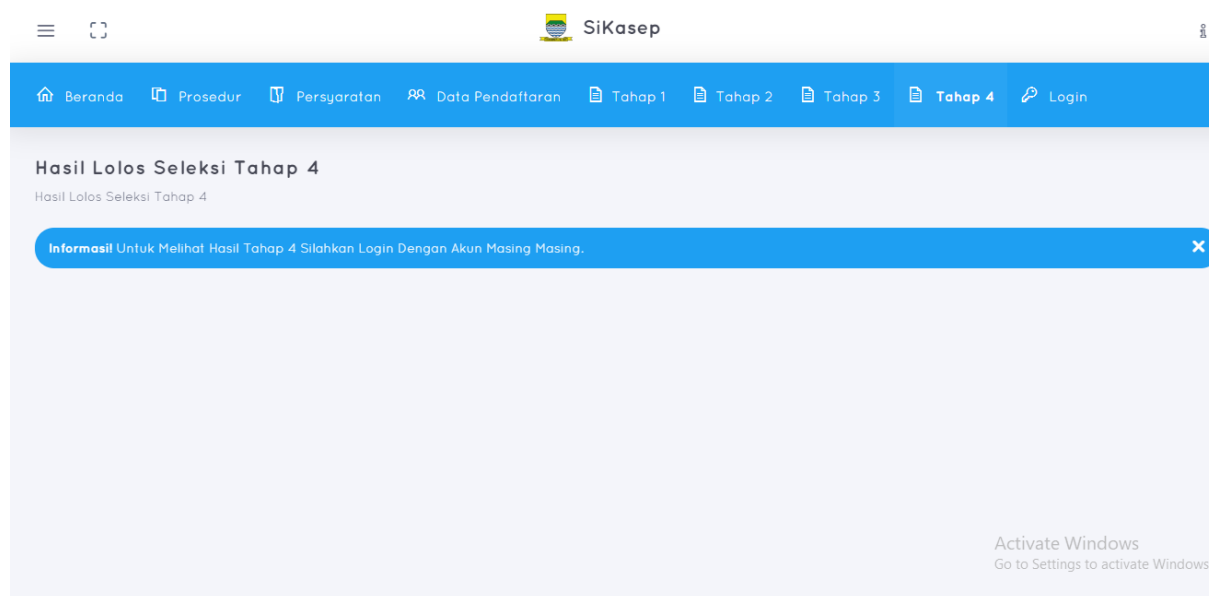
**Figure 3.** Results of Passing Stage 3 SIKASEP Selection

In the final analysis, the implementation of SIKASEP has effectively addressed the need for a professional and merit-based selection system. The inclusion of an "Acceptability" assessment during the training phase further ensures that future principals possess the factual and potential leadership qualities necessary to drive educational innovation. Once candidates complete the LP2KS training, they enter a placement queue, awaiting official appointment. The success of this digital transformation in Bandung City proves that integrating information systems into public sector recruitment can significantly minimize administrative disorder and maximize the quality of school leadership, ultimately benefiting the broader educational ecosystem.

**3.2. Discussion**

The implementation of the Professional School Principal Selection Information System (SIKASEP) has fundamentally altered the administrative landscape of leadership recruitment within the Bandung City Education Office. During the 2021/2022 academic period, the system successfully managed the registration and data processing for 520 candidates from various educational levels, including Kindergarten, Elementary, and Junior High Schools. The transition to this digital platform allowed for a centralized database, ensuring that every applicant's progress could be tracked in real-time. This level of oversight was previously unattainable under the manual system, where physical dossiers were often scattered and difficult to cross-reference efficiently. Quantitative analysis of the selection results reveals a high level of initial engagement, with 99.6% of registered applicants successfully passing the administrative screening phase. This high success rate at the entry level indicates that the SIKASEP interface is relatively accessible for basic data entry and document uploading. However, as the selection progressed into more rigorous technical phases—such as the Psychotest, Computer Assisted Test (CAT), and

Performance Assessment—the system served as a vital tool for maintaining transparency. By automating the scoring and announcement process, the Education Office was able to mitigate subjective biases, ensuring that the 82 candidates who reached the final stage did so based on verified merit.



**Figure 4.** Results of Passing the SIKASEP Substance Selection

Despite these achievements, the implementation process exposed a significant gap in digital readiness among the teaching workforce. A primary observation during the internship was the prevalence of technical errors stemming from low digital literacy. Many candidates struggled with the fundamental requirements of the online portal, such as compressing file sizes to meet system limits or identifying the correct digital folders for specific certifications. These "user-end" obstacles suggest that while the government has provided the necessary infrastructure, the human element—specifically the technological proficiency of senior educators—remains a critical bottleneck that requires ongoing intervention.

Infrastructure and technical stability were also identified as recurring challenges that impacted the user experience. During peak registration periods, the SIKASEP server experienced high latency, leading to session timeouts and failed document transmissions. These technical glitches often created anxiety among applicants, fearing that their submissions would not be recorded before the deadline. The observation of these issues highlighted the necessity for a more robust server architecture and a dedicated technical support desk capable of providing immediate troubleshooting. The reliance on a digital-only portal means that any systemic downtime directly affects the inclusivity and fairness of the selection process.

From a managerial perspective, the shift to SIKASEP has significantly optimized the workload of the Secretariat Division. Previously, staff spent hundreds of man-hours manually sorting, filing, and verifying hardcopy documents. With the digital system, the verification process has been streamlined through a dashboard that allows for rapid validation of uploaded files. This operational efficiency has allowed the Sub-Section of Programs, Data, and Information to focus more on the qualitative aspects of candidate evaluation rather than being bogged down by clerical tasks. The digital transformation has thus not only improved the speed of the selection process but also enhanced the organizational capacity of the office. Results suggest that the SIKASEP application is a powerful instrument for professionalizing the recruitment of school leaders, yet its success is heavily dependent on a supportive digital ecosystem. The integration of technology must be accompanied by comprehensive training programs for educators to bridge the literacy gap. Furthermore, the findings indicate that a hybrid support model—combining advanced digital portals with accessible human technical assistance—is currently the most effective approach for public sector agencies in transition. This initiative has laid a solid foundation for future e-

government projects within the Bandung City Education Office, proving that digital transparency is achievable through persistent facilitation and system refinement.

## 4. CONCLUSION

The implementation of the Professional School Principal Selection Information System (SIKASEP) has successfully modernized the recruitment process at the Bandung City Education Office, transforming it into a more transparent, accountable, and systematically organized procedure. By transitioning from a manual, paper-based administration to a centralized digital platform, the office has significantly reduced the risk of data redundancy and clerical errors while simultaneously enhancing the efficiency of the verification process for over 500 applicants. The activity confirms that digital integration is no longer an optional upgrade but a fundamental necessity for public sector agencies to maintain professional standards in educational leadership selection. Ultimately, SIKASEP has provided a merit-based environment where candidate progress is documented objectively, ensuring that the selection of school leaders is driven by verified administrative and competence-based data.

However, the effectiveness of this digital transformation is currently limited by the digital literacy gap among prospective candidates and occasional technical infrastructure instability. While the system architecture is robust, the human element—specifically the technological readiness of senior educators—remains a challenge that can lead to submission errors and user anxiety. To address these issues, it is highly recommended that the Bandung City Education Office implement a comprehensive digital capacity-building program for teachers before the selection period begins. Additionally, the technical infrastructure must be bolstered through periodic server maintenance and the establishment of a dedicated real-time technical support desk to assist users during peak registration hours. By combining continuous system refinement with targeted user facilitation, the SIKASEP portal can achieve its full potential as a gold standard for digital governance in the educational sector.

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