

Student Data Governance Based on Office Administration at TK DYAS Montessori School

Moh. Irwan Hadi

STIT Palapa Nusantara Lombok NTB

m.h4di@stipn.ac.id

Abstract

Student data governance is an essential component of school administration; however, studies specifically examining student data governance in kindergarten institutions from an office administration perspective remain limited. This study aims to describe and analyze student data governance based on office administration at TK DYAS Montessori School. This study employed a descriptive qualitative approach with a case study design. Data were collected through observation, interviews, and documentation involving the kindergarten principal, administrative staff, classroom teachers, and parents as supporting informants. Data were analyzed through data condensation, data display, and conclusion drawing and verification, while trustworthiness was strengthened through source, technique, and time triangulation. The findings show that student data management includes data collection, recording, storage, updating, security, and utilization for administrative services, school reporting, communication with parents, and fulfillment of institutional documents. The main obstacles include incomplete documents, non-periodic data updating, archive classification that is not yet fully systematic, suboptimal integration of manual and digital archives, and the absence of detailed standard operating procedures. The school has responded to these obstacles through document completion, archive organization, simple digital recapitulation, internal coordination, and the formulation of administrative procedures. This study concludes that office administration plays a strategic role in improving the accuracy, accessibility, security, and accountability of student data in early childhood education institutions. Theoretically, this study contributes to the

literature on school administration and student data governance in kindergarten contexts. Practically, it provides implications for strengthening administrative procedures, archive management, and data-based school services in early childhood education institutions.

Keywords: Student Data Governance; Office Administration; Student Data Management; Early Childhood Education; School Administration

INTRODUCTION

Student data management is one of the fundamental aspects of educational administration, including in early childhood education (PAUD) institutions. At the kindergarten level, student data do not merely function as administrative documents but also serve as the basis for planning learning services, grouping classes, monitoring child development, institutional reporting, communicating with parents, and supporting decision-making by the school principal. In the context of national policy, educational data governance is increasingly emphasized through the principle of Satu Data Pendidikan, Kebudayaan, Riset, dan Teknologi (One Data for Education, Culture, Research, and Technology), which requires data to be accurate, up to date, integrated, accountable, and easily accessible (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia, 2022). This principle is consistent with the concept of data-based decision-making, which positions data as the basis for planning, evaluation, and improvement of educational services (Mandinach & Gummer, 2016; Schildkamp, 2019).

The urgency of student data governance is particularly strong because PAUD represents the initial phase of formal educational services, which requires accurate recording of children's identities, ages, registration status, parental data, attendance, child development, and other supporting documents. PAUD plays a strategic role in supporting child development and readiness to enter subsequent levels of education; therefore, institutional administration needs to be managed in an orderly, systematic, and sustainable manner (Noor & Riinawati, 2021; Rasmani et al., 2021). Thus, student administration at the kindergarten level must be designed not only to meet documentation requirements but also to support educational services that are responsive to the needs of children and families.

In institutional practice, student data management often faces problems such as nonuniform recording, unscheduled data updating, poorly organized document storage, and

limited integration between manual and digital archives. These conditions may affect the effectiveness of school administration, especially when data are needed for reporting, verification, new student admission, communication with parents, and fulfillment of institutional documents. Less systematic data management may also reduce the accuracy of administrative services because schools must conduct additional tracing and verification before the data can be used.

Conceptually, office administration in educational institutions functions as a work system that regulates the recording, archiving, processing, storage, distribution, security, and utilization of information to support organizational effectiveness. Office administration cannot be understood merely as technical work; rather, it is part of information management that determines service accuracy, work efficiency, institutional accountability, and the quality of decision-making. Information system quality, data quality, ease of access, and user satisfaction have been shown to be related to the effectiveness of educational administrative services (Çelik & Ayaz, 2022; DeLone & McLean, 2003; Gürkut & Nat, 2018).

A number of previous studies have examined the digitalization of school administration, educational management information systems, and the use of data in educational management. Administrative digitalization, including in PAUD and school services, can improve the efficiency of recording, communication, data processing, and institutional services (Brantasari, 2021; Firmansyah et al., 2024; Riinawati, 2024). Educational management information systems are also considered capable of supporting decision-making and institutional services, although they continue to face challenges related to data quality, user capacity, infrastructure, and responsible data use (Forrester, 2019; Prasetyo et al., 2023). In a broader framework, digital transformation in education requires institutional readiness and the relevance of technology to user needs (Mukul & Büyüközkan, 2023).

Studies on data-based decision-making show that available data do not automatically produce better decisions unless supported by data literacy, work culture, user capacity, and clear organizational procedures. The use of data in education is influenced by how school actors understand data, their trust in data, professional support, and organizational structures that enable data to be used consistently (Coburn & Turner, 2011; Datnow & Hubbard, 2016; Hoogland et al., 2016; Wayman et al., 2012). Therefore, student data management in schools should be understood as both an administrative process and an organizational process involving procedures, human resources, technology, and internal coordination.

Nevertheless, most studies have tended to focus on learning digitalization, school information systems at the elementary and secondary levels, or the use of technology in the learning process. Studies that specifically discuss student data management in kindergarten institutions from an office administration perspective remain relatively limited. In fact, student administration at the kindergarten level has distinctive characteristics because children's data are closely related to age, individual development, parental involvement, completeness of registration documents, and the reporting needs of PAUD institutions. Student administrative services need to be managed responsively so that they support the needs of students, teachers, parents, and educational institutions (Chairunissa et al., 2021).

TK DYAS Montessori School is a relevant context for investigation because this institution provides educational services at the kindergarten level and has student administrative needs that include recording children's identities, archiving documents, maintaining parental data, recording attendance, and institutional reporting. In this context, student data management is not only related to the school's internal needs but also connected to demands for educational data accountability. Therefore, the school needs a clear administrative flow so that student data can be used accurately, securely, accessibly, and in an up-to-date manner.

The novelty of this study lies in its focus on connecting student data governance in kindergarten with the principles of office administration. This study views data not only as a collection of documents but also as part of an administrative work process that includes data collection, recording, organization, storage, updating, security, utilization, and evaluation. Based on this background, this study aims to describe and analyze office administration-based student data governance at TK DYAS Montessori School, including the management process, obstacles, and improvement efforts.

METHODS

This study used a descriptive qualitative approach with a case study design. The qualitative approach was selected because the study aimed to understand the practice of office administration-based student data management contextually in accordance with the actual conditions at TK DYAS Montessori School. Qualitative research enables researchers to explore meanings, experiences, processes, and social practices in natural settings (Creswell, 2014; Merriam & Tisdell, 2016). A case study design was used because the study focused on

one educational institution as the main case, allowing the researcher to obtain an in-depth understanding of the administrative processes, actors, and dynamics that occurred (Yin, 2018).

The study was conducted at TK DYAS Montessori School, located in Keruak, Keruak Village, Keruak Subdistrict, East Lombok Regency. The location was selected purposively because the institution has student administrative activities relevant to the research focus, particularly the recording of children's data, archiving of student documents, storage of parental data, use of data for administrative services, and institutional reporting. The study was carried out over one week in June 2024, covering the stages of preparation, data collection, data verification, analysis, and preparation of the research report.

The research subjects consisted of parties directly and indirectly involved in student data management. The research informants included the kindergarten principal, administrative or office staff, classroom teachers, and parents of students as supporting informants, totaling. Informants were selected using purposive sampling, namely the selection of informants based on their suitability to the data needs of the study. The informant criteria included having knowledge of student administration, being involved in data recording or data use, understanding procedures for storing student documents, and being willing to provide information relevant to the research focus (Merriam & Tisdell, 2016; Yin, 2018).

The research data sources consisted of primary and secondary data. Primary data were obtained through observations of student administrative activities and interviews with informants. Secondary data were obtained from school documents, such as registration forms, student master books, student lists, class data, attendance lists, parent/guardian documents, administrative archives, and other available supporting documents. The main research instrument was the researcher, while supporting instruments included an observation guide, an interview guide, and a documentation review sheet.

Data were collected through observation, semi-structured interviews, and documentation. Observation was used to examine administrative workflows, archive arrangement, data use, and document storage mechanisms. Interviews were conducted to explore information about the processes of recording, updating, and utilizing data, as well as the obstacles and improvement efforts in student data management. Documentation was

used to review the forms of administrative documents available and to examine their consistency with information obtained through observation and interviews.

Table 1. Research Focus and Indicators

Research Focus	Indicators	Data Sources
Student data recording	Completeness of student identity, registration forms, student master book, parent/guardian data, and supporting documents	Observation, interviews, documentation
Data storage	Manual archives, digital archives, document classification, document security, and ease of data access	Observation, interviews, documentation
Data updating	Mechanisms for updating children's identities, parental data, attendance, child development, and student status	Interviews, documentation
Data utilization	Administrative services, school reporting, communication with parents, accreditation, and decision-making	Observation, interviews, documentation
Obstacles to data management	Human resource limitations, incomplete documents, absence of detailed SOPs, technological limitations, and coordination constraints	Interviews, observation
Improvement efforts	Simple digitalization, periodic data updating, archive arrangement, SOP preparation, and strengthening of data security	Interviews, documentation

Data analysis was conducted through the stages of data condensation, data display, and conclusion drawing and verification. At the data condensation stage, the researcher selected, sorted, summarized, and focused the data obtained from observation, interviews, and documentation in accordance with the research focus. At the data display stage, information was organized in the form of descriptive narratives, tables, and finding matrices so that relationships among categories could be understood systematically. At the conclusion drawing and verification stage, the researcher interpreted patterns of findings to obtain an understanding of office administration-based student data management practices. These stages refer to the qualitative data analysis model of Miles, Huberman, and Saldaña (2014).

Data trustworthiness was maintained through source triangulation, technique triangulation, and time triangulation. Source triangulation was conducted by comparing information from the kindergarten principal, administrative staff, classroom teachers, parents of students, and school documents. Technique triangulation was conducted by comparing data from observations, interviews, and documentation. Time triangulation was conducted when information needed to be reconfirmed at different times. This strategy was used to

strengthen the credibility, consistency, and trustworthiness of the qualitative findings (Creswell, 2014; Merriam & Tisdell, 2016).

The research framework was based on the assumption that complete, orderly, accurate, secure, up-to-date, and accessible student data help schools provide administrative services, prepare reports, support communication with parents, and make institutional decisions. Conversely, data management that is not yet systematic may create obstacles such as difficult-to-locate documents, outdated data, slow administrative services, and less effective school reporting. Therefore, office administration-based student data management needs to include the recording, storage, updating, security, utilization, and evaluation of data on an ongoing basis.

RESULTS

The research findings are presented based on observation, interview, and documentation data at TK DYAS Montessori School. The presentation of findings focuses on the general description of the research site, the student data management process, obstacles to data management, improvement efforts, the data management flow, and negative data or anomalies in the findings. This section contains factual findings and is not yet directed toward theoretical interpretation.

General Description of the Research Site

TK DYAS Montessori School is an early childhood education institution that provides educational services at the kindergarten level. The school is located in Keruak, Keruak Village, Keruak Subdistrict, East Lombok Regency. Based on observations, school administrative activities were carried out through coordination among the kindergarten principal, administrative staff, and classroom teachers. These three elements have interrelated roles in managing student data, from new student admission and recording children's identities to document storage and data use for school service needs.

In general, student data management was carried out to support student data collection, preparation of class administrative documents, school reporting, communication with parents, and fulfillment of institutional documents. The data managed included children's identities, parent or guardian data, registration documents, attendance lists, child development records, and other supporting documents related to educational services. These

findings show that student data have an important function in supporting the smooth operation of school office administration.

Student Data Management Process

The findings show that the student data management process was carried out through the stages of data collection, data recording, data storage, data updating, data security, and data utilization. Data collection was conducted when students registered. At this stage, parents or guardians submitted the information and documents required by the school, such as the child's identity, parents' identities, residential address, contact number, and other supporting documents.

Data recording was conducted by entering student information into school administrative documents. Recording was performed manually, digitally, or through a combination of both, in accordance with the facilities and administrative policies of the school. The recorded data were used as the basis for preparing the student master book, attendance lists, class data, and other supporting documents. Recording is an important stage because it determines the completeness and accuracy of information used in administrative services.

Data storage was carried out through the archiving of physical and digital documents. Physical documents were stored in folders, binders, filing cabinets, or special storage areas provided by the school. Digital data were stored on computers or other storage media used by the school. Based on observations, data storage aimed to facilitate document retrieval, maintain student data security, and support orderly school administration.

Data updating was conducted when changes occurred in student information, such as changes in address, parents' contact numbers, student status, or other information related to the school's administrative needs. Data updating was generally conducted based on reports from parents, communication between teachers and parents, or school needs in preparing reports. However, data updating had not yet been fully conducted periodically and still depended on the availability of change information from parents or guardians.

Student data were utilized to prepare reports, manage attendance lists, support communication with parents, complete accreditation documents, and help teachers understand students' basic information. Thus, student data function not only as archives but also as the basis for more orderly administrative and educational services.

Table 2. Student Data Management Process at TK DYAS Montessori School

Data Management Stage	Activity Form	Documents/Data Used	Main Findings
Data collection	Collecting student information from parents/guardians	Registration forms, children's identities, parent/guardian data	Initial data were obtained during the student registration process
Data recording	Recording data in school administrative documents	Student master book, student list, class data	Recording supports orderly administration and preparation of school documents
Data storage	Storing physical and digital documents	Archive folders, binders, filing cabinets, digital files	Storage aims to facilitate retrieval and maintain data security
Data updating	Updating data when information changes occur	Parents' contact data, addresses, student status	Data updating still needs to be scheduled more periodically
Data utilization	Using data for services and reporting	Attendance lists, school reports, accreditation documents	Data support administrative services, communication, and reporting

Based on Table 2, student data management has included the main stages of office administration. However, the aspects of updating, security, and procedural standardization still need to be strengthened so that the available data are always accurate, complete, and usable.

Obstacles to Student Data Management

The first obstacle concerned the completeness of student documents. Not all documents could be collected completely at the time of registration because some parents had not submitted supporting documents on time. This condition required the school to reconfirm the matter with parents or guardians of students.

The second obstacle concerned data updating. Changes in student information, such as address, contact number, or family data, were not always reported directly to the school. As a result, there was a possibility that the stored data were not fully up to date. This obstacle could affect the effectiveness of communication between the school and parents, especially when the school needed information quickly.

The third obstacle concerned the document storage and classification system. Although student documents had been stored in school archives, document grouping still needed to be organized more systematically. Documents that had not been properly classified

could make retrieval difficult when data were required for reporting, accreditation, or other administrative needs.

The fourth obstacle concerned the use of technology. Technology had begun to be used in student data management, but it was not yet fully integrated into a well-organized administrative system. Some data were still managed manually, while others were stored digitally. This condition indicates the need for integration between manual and digital archives so that data management becomes more effective.

The fifth obstacle concerned the suboptimal standard operating procedures for student data management. The absence of detailed written procedures could lead to differences in the practices of recording, storing, updating, securing, and utilizing data among the parties involved.

Efforts to Improve Student Data Management

The school made several efforts to improve student data management. The first effort was to complete student documents through communication with parents or guardians. The school conducted confirmation when data or documents were incomplete so that each student had administrative data aligned with school needs.

The second effort was to reorganize student archives based on certain categories, such as academic year, study group, document type, or student name. Archive arrangement was intended to facilitate document retrieval, reduce the risk of data loss, and improve the efficiency of school administrative work.

The third effort was to utilize simple technology in student data management. The school began using digital devices to store or recapitulate certain data, such as student lists, parental data, and attendance lists. The use of technology helped accelerate data retrieval, updating, and processing, although its integration still needed to be strengthened.

The fourth effort was to strengthen coordination among the kindergarten principal, administrative staff, and classroom teachers. Coordination was necessary because classroom teachers are often the parties closest to students and parents, while administrative staff are responsible for recording and storing documents. Through good coordination, changes in student data can be communicated immediately and updated in school administrative documents.

The fifth effort was to prepare standard operating procedures for student data management. SOPs are needed to clearly regulate the stages of recording, storage, updating, security, and data use. With SOPs, student data management can be conducted more consistently, accountably, and sustainably.

Table 3. Obstacles and Improvement Efforts in Student Data Management

Aspect	Obstacles Found	Improvement Efforts
Document completeness	Some student documents were incomplete at registration	Confirming and collecting follow-up documents from parents
Data updating	Data changes were not always reported quickly	Conducting periodic data checking and updating
Archive storage	Document classification was not yet fully systematic	Arranging archives by academic year, study group, and document type
Technology utilization	Manual and digital data were not yet fully integrated	Gradually developing digital data recapitulation
Procedural standards	SOPs for data management were not yet optimal	Preparing guidelines or SOPs for student administration
Internal coordination	Data updating required coordination among parties	Strengthening communication among the kindergarten principal, administrative staff, and classroom teachers

Table 3 shows that obstacles to student data management are related not only to technical aspects but also to coordination, work habits, document completeness, and the availability of administrative procedures.

Visualization of the Student Data Management Flow

The student data management flow can be described as a continuous process that begins with data collection, followed by recording, storage, updating, utilization, and administrative evaluation and improvement.

**Data Collection → Data Recording → Data Storage → Data Updating →
Data Utilization → Administrative Evaluation and Improvement**

Figure 1. Student Data Management Flow at TK DYAS Montessori School

Figure 1 shows that student data management does not stop at document storage but continues through utilization and evaluation. The data that have been collected and stored need to be updated periodically so that they remain relevant to the administrative needs of the school.

Negative Data and Anomalies in the Findings

In addition to the main findings, this study identified several negative data or anomalies in student data management. First, some student documents were incomplete at the initial registration stage, requiring the school to collect follow-up documents. Second, data updating was not always conducted routinely because the school still depended on information from parents or guardians of students. Third, there was a potential discrepancy between data in manual archives and data recapitulated digitally when updates were not made at the same time.

These findings indicate that student data management still requires a more consistent administrative control system. These negative data do not indicate a failure of administrative management but provide evidence that the school needs to strengthen validation, updating, synchronization, and data security mechanisms so that student data management becomes more orderly and accurate.

Overall, the findings show that student data management has been implemented through administrative stages that include data collection, recording, storage, updating, security, and utilization. However, the process still requires strengthening in terms of document completeness, periodic data updating, integration of manual and digital archives, and preparation of SOPs for student administration.

DISCUSSION

The findings show that student data management at TK DYAS Montessori School has been implemented through the stages of data collection, recording, storage, updating, security, and utilization. This finding confirms that student data have a strategic position in supporting the school's office administration functions. Data serve not only as supplementary documents but also as the basis for administrative services, institutional reporting, communication with parents, and decision-making. This finding is consistent with the view that data use in education can support service planning, evaluation, and school quality improvement (Hoogland et al., 2016; Nurzen, 2022; Schildkamp, 2019).

The stages of student data collection and recording constitute the main foundation for building an orderly school information system. The completeness of data at the initial registration stage determines the quality of documents to be used in the following stages.

When data on children's identities, parental data, addresses, contact numbers, and supporting documents are recorded completely, the school can more easily provide administrative services and reporting. Conversely, incomplete documents or outdated data require reverification, making the administrative process less efficient. This finding supports the studies by Çelik and Ayaz (2022) and Gürkut and Nat (2018), which emphasized that information system quality is influenced by data quality, information reliability, and ease of use.

Student data storage through manual and digital archives indicates a transition from conventional administration to administration that is more adaptive to digital needs. Digitalization of educational administration can improve recording efficiency, data accessibility, and the effectiveness of institutional communication (Firmansyah et al., 2024; Riinawati, 2024). However, the use of two archive forms also creates challenges if it is not followed by consistent data synchronization. Differences between manual and digital data may occur when updates are not made simultaneously. Therefore, student archive management requires a clear classification system, updating schedule, validation procedure, and access arrangement.

Data updating is an important finding because student data updates still depend on information provided by parents or guardians. This condition indicates that data updating has not fully become a scheduled and systematic administrative process. From an office administration perspective, data updating is an important part of information control. Data that are not updated periodically may hinder school-parent communication, slow administrative services, and reduce the accuracy of reporting documents. This is consistent with Mandinach and Gummer (2016), who emphasized that data literacy in education includes the ability to manage, interpret, and use data appropriately to support educational decisions.

The use of student data in administrative services shows that data have a strategic function in school operations. Data are used to prepare attendance lists, complete student documents, support reporting, prepare accreditation documents, and strengthen communication between the school and parents. At the kindergarten level, data utilization has specific characteristics because student information is related to administrative identity, child development, parental involvement, and the needs of early childhood education services. Strengthening PAUD management needs to consider institutional problem

identification, administrative management, and service quality (Noor & Riinawati, 2021; Rasmani et al., 2021).

The findings can also be interpreted through the information systems success model. DeLone and McLean (2003) argued that information system success is related to system quality, information quality, service quality, use, user satisfaction, and the net benefits produced. In the context of this study, the quality of student data management can be viewed through the accuracy of recording, ease of access, storage security, regularity of updating, and usefulness of data for school services. Thus, school office administration is closely related to information system quality and institutional accountability.

This study also shows that technology alone is not sufficient to ensure the quality of data management. Technology needs to be supported by human resources who understand administrative procedures, clear archive classification, scheduled data updating, access-right arrangements, and SOPs that are implemented consistently. Forrester (2019) emphasized that school information systems face challenges in decision-making when data quality, user capacity, and data governance are inadequate. Therefore, strengthening student administration needs to be carried out through a combination of technology, procedures, human resource competence, and school leadership.

Compared with previous studies that have more frequently discussed administrative digitalization at the elementary and secondary education levels, this study offers a different emphasis because it focuses on student data management at the kindergarten level. Student administration in kindergarten has distinctive characteristics because the data are closely related to children's ages, parents' identities, child development, registration documents, and PAUD reporting needs. Student administrative services need to be managed responsively so that they support the needs of students, teachers, parents, and educational institutions (Chairunissa et al., 2021).

The novelty of this study lies in the use of an office administration perspective to examine student data management practices in kindergarten. To date, discussions of student data have more often been placed within the framework of information systems or school administration in general. This study shows that student data management can be analyzed more specifically through office administration functions, namely the recording, storage, updating, security, utilization, and evaluation of information. This perspective provides a conceptual contribution by showing that office administration is relevant not only to

business organizations or government agencies but also to the governance of early childhood education.

The theoretical implication of this study is the need to strengthen office administration studies in the context of educational institutions, especially PAUD. Student data management can become an important area of study because it is related to the quality of institutional governance, administrative accountability, and the effectiveness of educational services. In this context, data-based decision-making needs to be supported by valid and relevant data that are used reflectively in the school managerial process (Mandinach & Schildkamp, 2021; Vanlommel et al., 2017).

The practical implication of this study is the need for schools to develop a more orderly and documented student data management system. TK DYAS Montessori School can strengthen data governance through SOP preparation, task division among the kindergarten principal, administrative staff, and classroom teachers, and periodic data updating schedules. The school also needs to develop uniform archive formats, both manual and digital, so that student data are easier to locate, update, and use for administrative needs. This effort is consistent with the principle of digital transformation in education, which requires system readiness, human resources, and sustainable data governance (Mukul & Büyüközkan, 2023; Prasetyo et al., 2023).

The managerial implication of this study concerns the importance of the kindergarten principal's leadership in building a culture of orderly administration. The kindergarten principal has a strategic role in ensuring that data management is not only the responsibility of administrative staff but also part of the school's work system. Classroom teachers need to be involved because they have direct access to information on student development and communication with parents. Innovative leadership in PAUD is needed to ensure that managerial changes, including digitalization and administrative strengthening, proceed in accordance with institutional needs (Djafri et al., 2020).

The policy implication at the educational unit level is the need for internal guidelines on student data management. These guidelines may include the flow of data reception, the list of documents that must be collected, recording formats, storage procedures, updating schedules, validation mechanisms, data access arrangements, and document security measures. These guidelines are important for maintaining consistency in administrative work, especially when administrative staff turnover or changes in the school's work structure occur.

The internal policy also needs to be aligned with the principle of Satu Data Pendidikan so that data accuracy, integration, currency, and accountability can be implemented at the educational unit level (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia, 2022).

Nevertheless, this study has several limitations. First, the study focused on one institution, namely TK DYAS Montessori School; therefore, the findings are not intended to be broadly generalized to all kindergarten institutions. Second, the descriptive qualitative approach emphasized an in-depth understanding of the processes, obstacles, and improvement efforts in data management rather than a quantitative measurement of administrative system effectiveness. Third, the research data depended on observations, interviews, and documentation available at the time the study was conducted, so there may be other administrative aspects that were not fully revealed.

Future research is recommended to involve more kindergarten institutions in order to obtain comparisons of student data management practices across different institutional contexts. Further studies may also use mixed methods to measure the effectiveness of data management systems more objectively, for example through indicators of administrative service speed, document completeness, data accuracy, archive security, and parent satisfaction. In addition, future research may develop a simple model or application for office administration-based student data management that suits the needs and capacities of PAUD institutions. User capacity building also needs attention because changes in the data literacy of educators and administrative staff determine the sustainability of data use in decision-making (van Geel et al., 2017).

CONCLUSION

This study concludes that student data governance at TK DYAS Montessori School has been implemented through the stages of data collection, recording, storage, updating, security, and utilization. Student data are used to support school administrative services, preparation of institutional documents, communication with parents, reporting, and the administrative needs of learning. This finding confirms that office administration plays a strategic role in realizing orderly, accurate, secure, accessible, and accountable student data governance at the kindergarten level.

This study also found that student data management still faces obstacles in the form of incomplete documents, nonperiodic data updating, archive classification that is not yet fully systematic, suboptimal integration of manual and digital archives, and the absence of detailed SOPs. Improvement efforts carried out by the school include completing documents through communication with parents, arranging archives based on certain categories, using simple digital recapitulation, strengthening coordination among the kindergarten principal, administrative staff, and classroom teachers, and encouraging the development of more standardized administrative procedures.

Conceptually, this study expands office administration studies in the context of early childhood education by confirming that office administration is not only related to recording and archiving but also functions as an information management system that supports data accuracy, document security, service efficiency, and institutional accountability. Practically, the results of this study can serve as a reference for TK DYAS Montessori School and other PAUD institutions in strengthening student data governance through SOPs, periodic data updating, clear task division, systematic archiving, and gradual use of technology.

Future research is recommended to involve more kindergarten institutions in order to obtain a comparative overview of student data management practices across different institutional contexts. Future studies may also use mixed methods to measure the effectiveness of data management more objectively through indicators of document completeness, administrative service speed, data accuracy, archive security, and parent satisfaction. In addition, the development of a simple model or application for office administration-based student data management should be directed toward the needs, capacities, and characteristics of PAUD institutions.

REFERENCES

- Brantasari, M. (2021). Digitalisasi Penyelenggaraan PAUD. *Jurnal Pengabdian Kreativitas Pendidikan Mahakam (JPKPM)*, 1(1), 39–45. <https://doi.org/10.24903/jpkpm.v1i1.743>
- Çelik, K., & Ayaz, A. (2022). Validation of the DeLone and McLean information systems success model: A study on student information system. *Education and Information Technologies*, 27(4), 4709–4727. <https://doi.org/10.1007/s10639-021-10798-4>
- Chairunissa, C., Abdatisyah, K., Naqiyyah, R., & Prihantini, P. (2021). Layanan Pengelolaan Administrasi Peserta Didik di Sekolah Dasar di Masa Pandemi. *Aulad: Journal on Early Childhood*, 4(3), 50–58. <https://doi.org/10.31004/aulad.v4i3.171>

- Coburn, C. E., & Turner, E. O. (2011). Research on data use: A framework and analysis. *Measurement: Interdisciplinary Research and Perspectives*, 9(4), 173–206. <https://doi.org/10.1080/15366367.2011.626729>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Datnow, A., & Hubbard, L. (2016). Teacher capacity for and beliefs about data-driven decision making: A literature review of international research. *Journal of Educational Change*, 17(1), 7–28. <https://doi.org/10.1007/s10833-015-9264-2>
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9–30. <https://doi.org/10.1080/07421222.2003.11045748>
- Djafri, N., Arwildayanto, A., & Sukung, A. (2020). Manajemen Kepemimpinan Inovatif pada Pendidikan Anak Usia Dini dalam Perspektif Merdeka Belajar Era New Normal. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(2), 1441–1453. <https://doi.org/10.31004/obsesi.v5i2.901>
- Firmansyah, T., Setiyawan, M., & Turmudi, H. (2024). Development of a web-based school information system to improve administration and communication efficiency. *Formosa Journal of Applied Sciences*, 3(9), 3781–3790. <https://doi.org/10.55927/fjas.v3i9.11016>
- Forrester, V. V. (2019). School management information systems: Challenges to educational decision-making in the big data era. *International Journal on Integrating Technology in Education*, 8(1), 1–11. <https://doi.org/10.5121/ijite.2019.8101>
- Gürkut, C., & Nat, M. (2018). Important factors affecting student information system quality and satisfaction. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(3), 923–932. <https://doi.org/10.12973/ejmste/81147>
- Hoogland, I., Schildkamp, K., van der Kleij, F. M., Heitink, M. C., Kippers, W. B., Veldkamp, B. P., & Dijkstra, A. M. (2016). Prerequisites for data-based decision making in the classroom: Research evidence and practical illustrations. *Teaching and Teacher Education*, 60, 377–386. <https://doi.org/10.1016/j.tate.2016.07.012>
- Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia. (2022). *Peraturan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 31 Tahun 2022 tentang Satu Data Pendidikan, Kebudayaan, Riset, dan Teknologi*. <https://peraturan.bpk.go.id/Details/224733/permendikbudriset-no-31-tahun-2022>
- Mandinach, E. B., & Gummer, E. S. (2016). What does it mean for teachers to be data literate: Laying out the skills, knowledge, and dispositions. *Teaching and Teacher Education*, 60, 366–376. <https://doi.org/10.1016/j.tate.2016.07.011>
- Mandinach, E. B., & Schildkamp, K. (2021). Misconceptions about data-based decision making in education: An exploration of the literature. *Studies in Educational Evaluation*, 69, Article 100842. <https://doi.org/10.1016/j.stueduc.2020.100842>
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.

- Mukul, E., & Büyüközkan, G. (2023). Digital transformation in education: A systematic review of education 4.0. *Technological Forecasting and Social Change*, 194, Article 122664. <https://doi.org/10.1016/j.techfore.2023.122664>
- Noor, H., & Riinawati, R. (2021). Improving management of early childhood education (PAUD) through identification of institutional problems. *Berajah Journal*, 1(3), 117–124. <https://doi.org/10.47353/bj.v1i3.30>
- Nurzen, M. S. (2022). Data-based decision making for education planning: Strategies for principal success. *Jurnal Konseling dan Pendidikan*, 10(4), 589–596. <https://doi.org/10.29210/189500>
- Prasetyo, D. D., Ilya, A. H., Hidayat, S., & Citraningsih, D. (2023). Application of education management information system in the online learning process in madrasah. *AL-ISHLAH: Jurnal Pendidikan*, 15(1), 423–432. <https://doi.org/10.35445/alishlah.v15i1.2863>
- Rasmani, U. E. E., Palupi, W., Jumiatmoko, J., Zuhro, N. S., & Fitrianingtyas, A. (2021). Improving early childhood education management through problem identification of institutions. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(1), 307–314. <https://doi.org/10.31004/obsesi.v6i1.888>
- Riinawati, R. (2024). Integration of information and communication technology in educational administration management at school. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 8(1), 285–297. <https://doi.org/10.33650/al-tanzim.v8i1.6281>
- Schildkamp, K. (2019). Data-based decision-making for school improvement: Research insights and gaps. *Educational Research*, 61(3), 257–273. <https://doi.org/10.1080/00131881.2019.1625716>
- van Geel, M., Keuning, T., Visscher, A., & Fox, J. P. (2017). Changes in educators' data literacy during a data-based decision-making intervention. *Teaching and Teacher Education*, 64, 187–198. <https://doi.org/10.1016/j.tate.2017.02.015>
- Vanlommel, K., van Gasse, R., Vanhoof, J., & van Petegem, P. (2017). Teachers' decision-making: Data based or intuition driven? *International Journal of Educational Research*, 83, 75–83. <https://doi.org/10.1016/j.ijer.2017.02.013>
- Wayman, J. C., Jimerson, J. B., & Cho, V. (2012). Organizational considerations in establishing the Data-Informed District. *School Effectiveness and School Improvement*, 23(2), 159–178. <https://doi.org/10.1080/09243453.2011.652124>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.