

Research Article

Implementation of Data-Driven Planning Through the Utilization of the Education Report Card at SMP Negeri Satap Paccerakang, Luwu Regency

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Abstract: This study to analyze the Data-Based Planning (DBP) is a policy designed to improve the quality of educational planning through the utilization of educational data. However, the implementation of this policy at the school level still faces various challenges related to human resources, organizational culture, and technical support. This study aims to analyze the implementation of Data-Based Planning through the utilization of the Education Report Card at SMP Negeri Satap Paccerakang, Luwu Regency. The study employed a qualitative descriptive approach. Data were collected through interviews, observations, and documentation involving the principal, teachers, school operator, and school supervisor. Data analysis used the interactive model of Miles, Huberman, and Saldaña, while the policy implementation analysis referred to George C. Edward III's framework, which consists of communication, resources, disposition, and bureaucratic structure. The findings indicate that Data-Based Planning has been implemented through the utilization of Education Report Card data in preparing school programs and the School Activity and Budget Plan (RKAS). Communication and coordination regarding the policy have been carried out, although teachers' understanding of educational indicators remains varied. Supporting factors include developing human resource competence, policy support, technological infrastructure, and a growing data-driven organizational culture. Inhibiting factors include limited data literacy, resistance to change, technical constraints, and administrative dependency. The study concludes that the implementation of Data-Based Planning has been running adequately but requires strengthening in data literacy, technical assistance, and organizational support to optimize educational planning and improve school quality.

Keywords: Data-Based Planning; Education Report Card; Educational Planning; Policy Implementation; School Quality.

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1. Introduction

The transformation of education governance in Indonesia reflects a paradigm shift from experience-based decision-making toward data-driven decision-making. This change is aligned with government policies that encourage the use of data as the foundation for program planning, budgeting, and educational evaluation at the school level. One of the key policies supporting this transformation is Data-Based Planning (Perencanaan Berbasis Data/PBD), which is an approach that utilizes data from educational evaluation results as the basis for school decision-making. The implementation of PBD is supported by the Education Report Platform (Rapor Pendidikan), which provides information on education quality achievements based on indicators integrated with various national education data sources (Ministry of Education, Culture, Research, and Technology, 2023).

The use of data in educational planning is expected to improve the effectiveness of school programs, the accuracy of priority setting, resource efficiency, and the accountability of education delivery. Shafritz and Hyde (2017) explain that the use of data in public administration enables decision-making to be carried out objectively, measurably, and transparently, thereby improving the quality of public services. In the context of education, data utilization provides schools with the opportunity to identify problems more accurately,

determine priority improvements, and evaluate educational quality outcomes continuously (Schildkamp, 2019). However, the success of data-based policy implementation is not solely determined by the availability of information systems, but is also influenced by human resource readiness, data literacy skills, organizational support, and the commitment of policy implementers. Mandinach and Gummer (2016) emphasize that data literacy is an essential competence that educators must possess in order to understand, analyze, and utilize data as a basis for decision-making. Nugroho (2020) states that failures in public policy implementation generally occur at the implementation stage due to resource limitations, weak coordination, and low commitment among implementers.

These conditions are still found in various educational units, including SMP Negeri Satap Paccarakang, Luwu Regency. Initial observations indicate that the utilization of the Education Report (Rapor Pendidikan) in the preparation of school programs and the School Work and Budget Plan (RKAS) has not been optimally implemented. Some teachers still experience difficulties in understanding education quality indicators, identifying root problems, and integrating data analysis results into school programs. Planning practices are also still influenced by previously established administrative habits, meaning that data use has not yet become the primary basis for school decision-making. Research on data use in education has been widely conducted by previous scholars. Mandinach and Gummer (2016) emphasize the importance of data literacy in supporting educational decision-making. Schildkamp (2019) explains that data use can improve the quality of school planning and management. Datnow and Hubbard (2020) found that the success of data use is strongly influenced by organizational culture and policy implementers' commitment. In Indonesia, Musakirawati et al. (2023) found that the use of the Education Report Platform contributes positively to the implementation of Data-Based Planning in schools.

Recent studies also show the increasing importance of data utilization in educational management. Pratiwi, Wahyuni, and Hidayat (2024) found that the implementation of Data-Based Planning contributes to improving school management quality through more focused and needs-based program development. Rahmawati and Kurniawan (2024) explain that the use of the Education Report helps schools determine program priorities more objectively through data-driven decision-making. Wibowo and Sari (2023) show that the digital-based Education Report platform enables schools to obtain educational quality information more quickly, accurately, and in an integrated manner. Yusuf, Arifin, and Lestari (2024) emphasize that strengthening a data-based quality assurance system requires adequate human resources, infrastructure, and a supportive organizational culture to ensure sustainable policy implementation. These studies indicate that data utilization plays an important role in improving the quality of planning and decision-making in schools. However, studies specifically analyzing the implementation of Data-Based Planning through the use of the Education Report using the policy implementation perspective of George C. Edward III remain limited. This limitation is even more evident in the context of Sekolah Satu Atap (SATAP) schools, which have different characteristics compared to regular schools, particularly in terms of human resources, technological infrastructure, and access to policy support.

The novelty of this study lies in its analysis of the implementation of Data-Based Planning through the use of the Education Report using George C. Edward III's policy implementation model, which includes communication, resources, disposition, and bureaucratic structure, in SATAP schools. This study also identifies supporting and inhibiting factors in the implementation of PBD in schools with limited resources, thereby providing a more comprehensive understanding of the implementation of data-based policy in rural school contexts. This study aims to analyze the implementation of Data-Based Planning through the use of the Education Report at SMP Negeri Satap Paccarakang, Luwu Regency, and to identify the supporting and inhibiting factors in its implementation. The findings are expected to contribute theoretically to the development of studies on data-based education policy implementation and serve as recommendations for schools and education stakeholders in strengthening the implementation of Data-Based Planning.

2. Literature Review

Data-Based Planning in Education

Data-Based Planning (DBP) is an approach that places data at the center of organizational planning and decision-making processes. In the educational context, DBP is utilized to identify problems, determine priorities, allocate resources, formulate programs, and

evaluate educational outcomes based on objective evidence rather than assumptions or intuition.

The growing emphasis on data utilization reflects a broader transformation in educational governance toward accountability, transparency, effectiveness, and evidence-based management. According to Kim Schildkamp (2019), data-informed decision-making enables schools to gain a deeper understanding of their performance and educational challenges, thereby supporting more targeted and effective improvement strategies. Similarly, Amanda Datnow and Hubbard (2020) argue that systematic data use contributes to continuous school improvement by facilitating reflection, monitoring, and evidence-based interventions.

In Indonesia, Data-Based Planning has become a key component of educational reform through policies introduced by the Ministry of Education, Culture, Research, and Technology. Schools are encouraged to utilize educational data as the foundation for planning, budgeting, and quality improvement initiatives. Consequently, DBP is expected to enhance the effectiveness of educational governance and promote better educational outcomes.

Education Report Card as a Strategic Planning Instrument

The Education Report Card (Rapor Pendidikan) is a national educational evaluation platform designed to provide comprehensive information regarding school quality and educational performance. The platform integrates data from multiple educational sources and presents indicators related to learning outcomes, school climate, educational quality, and institutional performance.

According to the Ministry of Education, Culture, Research, and Technology (2023), the Education Report Card serves as the primary instrument supporting Data-Based Planning by enabling schools to identify strengths, weaknesses, and priority areas for improvement. The availability of reliable educational data allows school leaders and teachers to formulate more evidence-based policies and programs.

Research conducted by Musakirawati et al. (2023) found that the utilization of the Education Report Card significantly improves the quality of school planning by helping educational stakeholders identify priorities more systematically. Likewise, Rahmawati and Kurniawan (2024) reported that schools using Education Report Card data tend to make more objective and accountable decisions compared to schools relying primarily on experience-based planning.

Therefore, the Education Report Card functions not merely as an evaluation tool but also as a strategic management instrument that supports evidence-based educational planning and policy implementation.

George C. Edward III's Policy Implementation Theory

Policy implementation is a critical stage in the public policy process because the success of a policy largely depends on how effectively it is translated into practice. One of the most influential implementation models was developed by George C. Edward III (1980), who identified four key variables influencing policy implementation: communication, resources, disposition, and bureaucratic structure.

Communication

Communication refers to the process of transmitting policy information to implementers. Effective communication ensures that policy objectives, procedures, and expectations are clearly understood by all stakeholders. Edward III emphasizes that successful communication depends on transmission, clarity, and consistency. In the context of Data-Based Planning, communication is essential to ensure that school personnel understand the objectives and procedures involved in utilizing Education Report Card data for planning and decision-making.

Resources

Resources include human resources, information, authority, and facilities necessary to implement a policy effectively. Even well-designed policies may fail if adequate resources are unavailable. According to Ellen B. Mandinach and Gummer (2016), data literacy is a critical competency that educators must possess to interpret and utilize data effectively. Therefore, human resource capacity becomes a decisive factor in the successful implementation of Data-Based Planning.

Disposition

Disposition refers to the attitudes, commitment, and willingness of policy implementers to carry out a policy. Positive attitudes toward a policy increase the likelihood of successful implementation, while resistance or lack of commitment may hinder policy outcomes.

Datnow and Hubbard (2020) argue that organizational commitment and readiness for change significantly influence the effectiveness of data utilization in educational institutions. Consequently, fostering positive attitudes toward evidence-based decision-making is essential for the success of Data-Based Planning.

Bureaucratic Structure

Bureaucratic structure refers to organizational arrangements, procedures, coordination mechanisms, and operational guidelines that support policy implementation. Clear organizational structures and standard operating procedures (SOPs) facilitate consistency and accountability in implementation. Edward III (1980) emphasizes that clearly defined responsibilities and procedures are necessary to ensure effective policy execution and minimize implementation gaps.

Data Literacy in Educational Decision-Making

Data literacy is the ability to collect, analyze, interpret, and use data effectively for decision-making purposes. In modern educational management, data literacy has become an essential competency for teachers, principals, and educational administrators.

Mandinach and Gummer (2016) define data literacy as educators' capacity to transform educational data into actionable knowledge that supports instructional improvement and organizational development. Schools with higher levels of data literacy are generally more capable of identifying educational challenges, setting priorities, and evaluating program effectiveness.

Furthermore, Sutrisno and Yuliana (2023) found that limited data literacy remains one of the primary obstacles to implementing data-driven educational policies in Indonesia. Therefore, continuous professional development and technical assistance are necessary to strengthen educators' data literacy competencies.

Data-Driven Organizational Culture

A data-driven organizational culture refers to an environment in which data is routinely used as a basis for planning, evaluation, and decision-making. In educational institutions, such a culture is reflected in the regular use of data during meetings, program evaluations, budget planning, and school improvement initiatives.

Research by Amanda Datnow, Park, and Kennedy-Lewis (2013) highlights that sustainable data use requires a collaborative culture that encourages dialogue, reflection, and collective problem-solving. Similarly, Schildkamp (2019) argues that organizational culture plays a vital role in determining whether data becomes an integral component of educational management.

As a result, the success of Data-Based Planning depends not only on technological infrastructure and data availability but also on the extent to which schools cultivate a culture that values evidence-based decision-making.

3. Materials and Method

This study employed a qualitative approach with a descriptive research design. A qualitative approach was selected because it aims to provide an in-depth understanding of the phenomenon of Data-Based Planning (DBP) implementation through the utilization of the Education Report Card in a real school setting. According to Creswell (2018), qualitative research is used to explore and understand the meanings that individuals or groups ascribe to social issues and ongoing policy processes. Through this approach, the researchers sought to obtain a comprehensive understanding of the implementation of Data-Based Planning at SMP Negeri Satap Paccarakang, Luwu Regency, South Sulawesi Province.

Research informants were selected using a purposive sampling technique, whereby participants were intentionally chosen based on their knowledge, experience, and direct involvement in the implementation of Data-Based Planning within the school (Sugiyono, 2022). The informants consisted of the school principal, teachers, the school operator, and the school supervisor, all of whom played significant roles in planning activities, data management, and the implementation of data-driven educational policies.

Data were collected through in-depth interviews, observations, and document analysis. Interviews were conducted to obtain detailed information regarding the implementation of Data-Based Planning, the utilization of the Education Report Card, and the factors influencing its implementation. Observations were carried out to directly examine data-based planning activities, coordination processes, and the use of Education Report Card information in school decision-making. Document analysis was employed to review relevant supporting documents, including the School Activity and Budget Plan (RKAS), school

planning documents, meeting minutes, and data available on the Education Report Card Platform.

Data analysis followed the interactive model proposed by Miles, Huberman, and Saldaña (2014), which consists of three stages: data reduction, data display, and conclusion drawing or verification. Data reduction involved selecting, focusing, and simplifying field data relevant to the research objectives. The reduced data were then organized and presented in a narrative format to facilitate interpretation. The final stage involved drawing conclusions based on patterns, themes, and relationships identified throughout the research process.

The trustworthiness of the data was ensured through source triangulation, technique triangulation, and time triangulation. Source triangulation was conducted by comparing information obtained from different informants, while technique triangulation involved comparing findings from interviews, observations, and document analysis. Time triangulation was applied by collecting data at different periods to verify the consistency of the information obtained (Creswell, 2018).

The analysis of policy implementation in this study was guided by the policy implementation model developed by George C. Edward III (1980), which comprises four key dimensions: communication, resources, disposition, and bureaucratic structure. These dimensions served as the analytical framework for examining the implementation of Data-Based Planning through the utilization of the Education Report Card at SMP Negeri Satap Paccarakang, Luwu Regency, while also identifying the supporting and inhibiting factors influencing the implementation of the policy.

4. Results and Discussion

Implementation of Data-Based Planning through the Utilization of the Education Report Card

This study analyzed the implementation of Data-Based Planning (DBP) through the utilization of the Education Report Card at SMP Negeri Satap Paccarakang, Luwu Regency, using George C. Edward III's policy implementation model, which consists of communication, resources, disposition, and bureaucratic structure. In addition, the study identified the supporting and inhibiting factors affecting the implementation of the policy.

Table 1. Implementation of Data-Based Planning at SMP Negeri Satap Paccarakang.

Implementation Aspect	Research Findings
Communication	Socialization and coordination have been conducted through school meetings and supervision activities; however, teachers' understanding of Education Report Card indicators remains varied.
Resources	The school has access to the platform, computers, and internet facilities, but teachers' data literacy and network quality are still limited.
Disposition	The principal and teachers support the use of data in planning, although some still perceive DBP as an administrative requirement.
Bureaucratic Structure	There is no specific Standard Operating Procedure (SOP) for DBP implementation, and the division of responsibilities for data management remains suboptimal.

(Research Source, 2026).

Based on table 1, the implementation of Data-Based Planning through the utilization of the Education Report Card demonstrates varying levels of effectiveness across the four dimensions proposed by Edward III (1980). The findings indicate that communication regarding the policy has been carried out through socialization activities, school meetings, and supervisory assistance. However, teachers' understanding of the indicators presented in the Education Report Card remains uneven. This suggests that while the transmission of information has been adequately implemented, the clarity of communication still requires improvement. According to Edward III (1980), effective policy implementation depends not only on the dissemination of information but also on the extent to which policy implementers clearly understand policy objectives and procedures. In terms of resources, the school has adequate access to technological facilities, including computers, internet connectivity, and the Education Report Card platform. Nevertheless, limitations in teachers' data literacy and occasional technical constraints continue to hinder the optimal use of educational data. These findings confirm that human resource capacity remains a critical factor in successful policy implementation. This result is consistent with Mandinach and Gummer (2016), who emphasize that data literacy is a fundamental prerequisite for evidence-based decision-making in educational institutions.

The disposition dimension reveals a generally positive attitude toward Data-Based Planning among school leaders and teachers. Most informants acknowledged the importance of utilizing data to identify priority issues and formulate more targeted school programs. However, some teachers still perceive DBP as an additional administrative burden, indicating that the transition toward a data-driven organizational culture is still in progress. This finding supports the argument of Datnow and Hubbard (2020), who state that organizational commitment and readiness for change are essential factors influencing the successful use of data in educational settings. Regarding bureaucratic structure, the absence of a specific Standard Operating Procedure (SOP) and the concentration of data management responsibilities on a limited number of personnel indicate that organizational support mechanisms for DBP have not yet been fully institutionalized. Consequently, implementation remains dependent on individual initiatives rather than standardized organizational procedures. According to Edward III (1980), clear organizational structures, defined responsibilities, and formal procedures are necessary to ensure consistency and sustainability in policy implementation.

Overall, the findings suggest that the implementation of Data-Based Planning at SMP Negeri Satap Paccarakang has progressed positively, particularly in terms of policy acceptance and the availability of basic technological resources. However, improvements in communication clarity, data literacy, organizational procedures, and stakeholder participation are still required to maximize the effectiveness of the Education Report Card as a tool for evidence-based educational planning and decision-making.

Communication

The findings reveal that communication regarding the Data-Based Planning (DBP) policy has been implemented through socialization activities, school coordination meetings, and guidance provided by school supervisors. Teachers reported that information related to DBP and the use of the Education Report Card has been delivered regularly; however, differences remain in teachers' ability to understand and interpret the available indicators.

Table 2. Communication and Teachers' Perceptions of Data-Based Planning Implementation.

Key Themes/Concepts	Informant Code	Informant's Statement	Initial Interpretation (Theoretical Relevance)
Information Transmission	Teacher 1	"We have participated in several socialization sessions on Data-Based Planning and the use of the Education Report Card."	The transmission of policy information has been conducted through socialization activities and coordination meetings, indicating that implementers have received information regarding DBP.
Information Clarity	Teacher 1	"However, not all teachers fully understand how to interpret the indicators and identify priority issues from the available data."	Limited understanding of indicators demonstrates that the clarity of policy information remains uneven among teachers.
Consistency of Information	ofTeacher 2	"Information about DBP has been delivered frequently, but some indicators in the Education Report Card are still difficult to understand because many of the terms are new to teachers."	Although information has been delivered consistently, the technical language used in policy communication requires further explanation and guidance.
Coordination and Participation	andObservation	The school regularly organizes coordination meetings to discuss Education Report Card results as the basis for preparing school programs and the School	Coordination mechanisms support policy implementation; however, limited teacher participation in data analysis may affect the

Activity and Budget Plan quality of planning
(RKAS). decisions.

(Research Source, 2026).

Based on table 2, communication in the implementation of Data-Based Planning has generally been established through various formal channels, including socialization activities, school meetings, and guidance from school supervisors. These communication efforts demonstrate that the school has attempted to ensure that teachers receive information regarding the objectives, procedures, and instruments of DBP, particularly the use of the Education Report Card as a reference for preparing school programs and the School Activity and Budget Plan (RKAS). However, the findings indicate that the clarity of information remains a challenge. Although teachers have participated in several socialization activities, some of them still experience difficulties in interpreting indicators and identifying priority problems based on the available data. This condition suggests that the delivery of information alone is insufficient if it is not accompanied by practical explanations, technical guidance, and opportunities for teachers to directly practice data analysis.

Furthermore, observational findings show that coordination meetings have been conducted regularly to discuss the results of the Education Report Card. Nevertheless, not all teachers actively participate in the data analysis process. This indicates that communication has not yet fully encouraged equal understanding and involvement among all policy implementers. In accordance with Edward III's implementation theory, effective communication depends on the transmission, clarity, and consistency of information. In this study, the transmission and consistency components have been relatively well implemented, while the clarity component still requires improvement. These findings are consistent with Hoerudin's argument that the success of educational policy implementation is strongly influenced by effective communication among policy implementers. In the context of DBP implementation, effective communication is not only reflected in the frequency of information delivery but also in teachers' ability to understand, interpret, and utilize data for school planning. Therefore, strengthening technical assistance, simplifying policy terminology, and increasing teachers' active involvement in data analysis are necessary to improve the effectiveness of Data-Based Planning implementation.

Resources

The findings reveal that resources constitute an important factor in the implementation of Data-Based Planning (DBP). Although the school has access to the Education Report Card platform and basic supporting facilities, differences in teachers' data literacy, limited computer facilities, and unstable internet connectivity continue to affect the effectiveness of policy implementation. Informants indicated that the ability to understand, interpret, and use educational data remains uneven among teachers.

Table 3. Resources and Teachers' Capacity in Data-Based Planning Implementation.

Key Themes/Concepts	Informant Code	Informant's Statement	Initial Interpretation (Theoretical Relevance)
Human Resources and Data Literacy	Teacher 1	"Not all teachers possess the same ability to understand data. Some still experience difficulties in interpreting indicators and identifying root causes of problems."	Uneven data literacy among teachers limits their capacity to use Education Report Card data as a basis for planning and decision-making.
Technological Facilities	Teacher 2	"Internet connectivity is sometimes unstable, making access to the Education Report Card platform slow. Computer facilities are also limited."	Limited infrastructure and unstable connectivity may reduce the accessibility and efficiency of digital data utilization.
Access to Information Systems	Observation	The Education Report Card platform is primarily accessed by the school principal and the school operator rather than by teachers directly.	Centralized access to the platform may reduce teachers' direct involvement in reviewing and interpreting educational data.

Resource Utilization	Observation	Teachers generally rely on the principal or school operator during coordination meetings.	The availability of information provided by resources does not automatically ensure effective implementation unless all implementers have sufficient capacity and access to utilize them.
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(Research Source, 2026).

Based on table 3, the implementation of Data-Based Planning is supported by the availability of basic technological resources, including access to the Education Report Card platform, internet connectivity, and computer facilities. However, the findings indicate that these resources have not yet been utilized optimally by all teachers. The most significant challenge is related to human resources, particularly the varying levels of teachers' data literacy and their ability to interpret indicators, identify root causes of problems, and formulate appropriate follow-up programs. Furthermore, the limited availability of computers and unstable internet connectivity create practical barriers to accessing the Education Report Card platform. These conditions may delay the process of retrieving, reviewing, and utilizing educational data. Observational findings also show that access to the platform is still concentrated among the school principal and school operator. As a result, teachers tend to receive information indirectly through meetings rather than independently accessing and analyzing the data.

This finding indicates that the availability of technology alone is not sufficient to ensure the successful implementation of DBP. According to Edward III, resources in policy implementation include human resources, information, authority, and facilities. In this study, the school has relatively adequate basic facilities and access to information systems; however, teachers' capacity to utilize these resources remains limited. Therefore, human resource capacity becomes a more influential factor than the mere availability of technological infrastructure. These findings are consistent with Mandinach and Gummer's argument that data literacy is a fundamental prerequisite for data-driven decision-making. In the context of DBP, teachers need not only access to digital platforms but also the competence to understand data, interpret educational indicators, identify priority issues, and translate findings into relevant school programs and budgets. Therefore, continuous training, mentoring, and broader access to the Education Report Card platform are necessary to strengthen teachers' capacity and improve the effectiveness of Data-Based Planning implementation.

Disposition

The findings reveal that disposition, particularly implementers' attitudes, acceptance, and commitment, plays an important role in the implementation of Data-Based Planning (DBP). School leaders and teachers generally demonstrate positive attitudes toward the use of data in developing school programs because data are considered useful for identifying priority issues and determining appropriate interventions. However, some teachers initially perceived DBP as an additional administrative responsibility due to the requirement to analyze data and prepare supporting reports.

Table 4. Disposition and Teachers' Attitudes toward Data-Based Planning Implementation

Key Themes/Concepts	Informant Code	Informant's Statement	Initial Interpretation (Theoretical Relevance)
Policy Acceptance	Teacher 1	"We support the use of data in developing school programs because data help us identify which issues truly need to be prioritized."	Positive acceptance of DBP indicates that teachers recognize the value of data in supporting more accurate and relevant school planning.
Perceived Administrative Burden	Teacher 2	"At first, it felt like extra administrative work because we had to analyze data and prepare reports."	Initial resistance may emerge when implementers perceive a policy as adding to their workload and

Commitment to Data Utilization	Observation	Teachers have gradually begun using data as a basis for discussion during school meetings.	administrative responsibilities. The gradual use of data in school discussions reflects growing commitment to integrating DBP into planning processes.
Organizational Culture Change	Observation	Data-based discussion has been introduced in school meetings, although it has not yet become a deeply embedded organizational culture.	Sustainable implementation requires continuous reinforcement so that data utilization becomes a routine organizational practice rather than a temporary administrative activity.

(Research Source, 2026).

Based on table 4, the disposition of school implementers toward Data-Based Planning is generally positive. Teachers and school leaders acknowledge that the use of data can assist the school in identifying priority problems and preparing more relevant programs. This positive perception indicates that implementers have begun to understand the practical benefits of DBP, particularly in supporting more systematic and evidence-based decision-making. Nevertheless, the findings also show that some teachers initially perceived DBP as an additional administrative burden. The requirement to analyze data, interpret indicators, and prepare reports may create resistance, especially when teachers have limited experience in data analysis or already face substantial teaching and administrative workloads. This condition suggests that positive attitudes toward DBP need to be supported by adequate assistance, simplified procedures, and continuous guidance to reduce the perception that the policy only increases administrative tasks.

Furthermore, observational findings demonstrate that teachers have gradually started to use data as a basis for discussion during school meetings. Although this practice has not yet become a deeply embedded organizational culture, it reflects an early stage of behavioral and cultural change within the school. The integration of data into routine discussions indicates that teachers are beginning to shift from intuition-based planning toward more evidence-based consideration in determining school priorities. In accordance with Edward III's implementation theory, disposition refers to the attitudes, willingness, and commitment of policy implementers in carrying out a policy. In this study, school leaders and teachers generally support the implementation of DBP; however, the process of building a data-oriented organizational culture requires time, consistency, and continuous reinforcement. The commitment of school leaders is particularly important in encouraging teachers to view DBP not merely as an administrative obligation but as a useful instrument for improving school quality.

These findings align with Datnow and Hubbard's argument that successful data utilization depends heavily on organizational commitment and implementers' readiness to embrace change. Therefore, strengthening teachers' motivation, recognizing their involvement in data-based planning, and institutionalizing data discussions in regular school meetings are necessary to ensure that DBP becomes an integral part of the school's organizational culture.

Bureaucratic Structure

The findings reveal that the bureaucratic structure supporting the implementation of Data-Based Planning (DBP) has not yet been fully institutionalized at the school level. Although schools follow general guidelines provided by the education office and school supervisors, there is no specific Standard Operating Procedure (SOP) regulating the implementation of DBP. In addition, responsibilities related to data management remain concentrated on a limited number of individuals, particularly the school operator, while teachers' involvement in data-related activities is still relatively limited.

Table 5. Bureaucratic Structure and Organizational Arrangements in Data-Based Planning Implementation.

Key Themes/Concepts	Informant Code	Informant's Statement	Initial Interpretation (Theoretical Relevance)
Standard Operating Procedures (SOPs)	Teacher 1	"So far, there is no specific SOP for DBP implementation at the school level. We still follow general guidelines provided by the education office and school supervisors."	The absence of formal SOPs may create inconsistencies in implementation practices and reduce organizational standardization.
Task Distribution	Teacher 2	"Most data management activities are still handled by the school operator because not all teachers are accustomed to using the platform."	Uneven distribution of responsibilities may increase dependence on specific individuals and limit broader organizational participation.
Organizational Coordination	Observation	Discussions of Education Report Card data are not conducted regularly or according to a structured schedule.	The lack of structured coordination mechanisms may affect the continuity and effectiveness of data-based planning processes.
Dependency on Key Personnel	Observation	Data collection, management, and interpretation activities are largely concentrated on the school operator and principal.	Overreliance on certain personnel may reduce organizational resilience and sustainability in policy implementation.

(Research Source, 2026).

Based on table 5, the bureaucratic structure for implementing Data-Based Planning remains relatively informal and relies heavily on general guidance from external authorities rather than school-specific operational procedures. Although schools have adopted the principles of DBP, the absence of a dedicated SOP indicates that implementation practices may vary depending on individual understanding and initiative. This condition may lead to inconsistencies in the planning process and reduce the effectiveness of policy implementation over time. Furthermore, the findings indicate that responsibilities for managing and accessing educational data are still concentrated on the school operator and, to some extent, the school principal. While this arrangement facilitates administrative efficiency, it may also limit teachers' opportunities to engage directly with educational data. As a result, the implementation of DBP tends to depend on a small number of individuals rather than becoming a collective organizational responsibility.

Observational findings also demonstrate that discussions regarding Education Report Card data are not conducted regularly or according to a structured schedule. This suggests that coordination mechanisms related to DBP have not yet been fully integrated into routine school management practices. Without regular forums for data review and discussion, opportunities to identify educational issues, evaluate program outcomes, and formulate evidence-based interventions may be reduced. According to Edward III's implementation theory, a clear bureaucratic structure is essential for ensuring effective and consistent policy implementation. Such a structure includes standardized procedures, clear lines of authority, and well-defined responsibilities among implementers. In this study, the absence of specific SOPs and the concentration of responsibilities among a limited number of personnel indicate that the bureaucratic structure remains insufficiently developed to support the full institutionalization of DBP.

These findings suggest that strengthening organizational governance is necessary to enhance the effectiveness and sustainability of Data-Based Planning implementation. The development of school-level SOPs, clearer task distribution, regular data-review meetings, and broader teacher involvement in data management processes would help reduce

dependence on specific individuals and promote a more collaborative and sustainable approach to data-based decision-making.

Supporting and Inhibiting Factors in the Implementation of Data-Based Planning

The implementation of Data-Based Planning (DBP) at SMP Negeri Satap Paccarakang is influenced by several supporting and inhibiting factors. These factors determine the extent to which educational data, particularly data from the Education Report Card, can be understood, analyzed, and utilized as the basis for preparing school programs and the School Activity and Budget Plan (RKAS). The findings show that DBP implementation has begun to develop positively; however, its effectiveness is still influenced by the readiness of human resources, institutional support, technological facilities, and the organizational culture within the school.

Supporting Factors

a. Improving Human Resource Competence

One of the main supporting factors in DBP implementation is the gradual improvement of human resource competence. Although teachers' data literacy levels remain varied, the school has several educators and administrative staff who understand the Education Report Card platform and are able to assist in data management and analysis activities. The school principal, school operator, and several teachers play an important role in guiding other teachers to understand educational indicators and use data in preparing school programs.

One informant stated:

"We continuously encourage teachers to learn how to understand Education Report Card data so that school planning can be more targeted."

This statement shows that the school has made efforts to improve teachers' understanding of educational data. The development of human resource competence is important because DBP requires teachers not only to access data but also to interpret indicators, identify educational problems, determine priority issues, and formulate appropriate follow-up programs. When teachers have better data literacy, school planning can be more relevant to actual needs and problems.

This finding is consistent with Mandinach and Gummer (2016), who emphasized that data literacy is a fundamental capability for evidence-based decision-making in educational organizations. In the context of DBP, improving teachers' competence supports the transition from planning based on assumptions or routine activities toward planning based on measurable educational conditions.

Government Policy Support

Government policy support is another important factor that facilitates DBP implementation. National education policies that encourage the use of Education Report Card data provide schools with direction and legitimacy to implement data-driven planning and budgeting practices. These policies encourage schools to use educational data as a reference in identifying problems, setting priorities, developing programs, and preparing the RKAS.

The existence of policy guidance from the education office and school supervisors also helps schools understand the general procedures for implementing DBP. Although the school does not yet have a specific internal SOP, external policy guidance provides a framework for schools to begin integrating data into their planning processes.

Government support is important because it strengthens the commitment of school leaders and teachers to implement DBP. When DBP is supported by official policy, school personnel are more likely to view data utilization as an important part of school management rather than merely an optional administrative activity. Therefore, policy support contributes to the institutionalization of data-based planning practices at the school level.

Technological Infrastructure

The availability of technological infrastructure also supports the implementation of DBP. The school has access to computers, internet connectivity, learning accounts, and the Education Report Card platform. These facilities enable the school to access educational data, review performance indicators, and use information from the platform as a basis for planning and evaluation.

Technological infrastructure is important because DBP relies on digital systems for collecting, presenting, and analyzing educational data. The Education Report Card platform provides information related to learning outcomes, school management, educational quality, and other relevant indicators. Through this platform, schools can identify areas that require improvement and develop programs based on evidence.

Although the availability of infrastructure does not automatically guarantee successful implementation, it provides an essential foundation for DBP. Without computers, internet access, and learning accounts, schools would face difficulties in accessing and utilizing the Education Report Card platform. Therefore, technological facilities support the efficiency and accessibility of data management and planning processes.

Emerging Data-Driven Organizational Culture

Another supporting factor is the gradual emergence of a data-driven organizational culture. The findings indicate that school personnel have increasingly begun to use educational data during coordination meetings, program evaluations, and the preparation of the RKAS. Teachers and school leaders have started to discuss Education Report Card results when identifying school problems and determining program priorities.

This development reflects a gradual shift from conventional planning practices toward evidence-based decision-making. Previously, school programs may have been developed primarily based on routine annual activities or personal experiences. However, the increasing use of data in school discussions indicates that the school is beginning to recognize the importance of evidence in improving educational quality.

A data-driven organizational culture is important because it encourages school personnel to make decisions based on objective information rather than assumptions. When data discussion becomes a regular practice, teachers and school leaders can work collaboratively to identify problems, monitor program implementation, and evaluate outcomes. Although this culture has not yet been fully institutionalized, its emergence represents a positive foundation for strengthening DBP implementation in the future.

Inhibiting Factors

Limited Data Literacy among Teachers

The most significant inhibiting factor in DBP implementation is limited data literacy among teachers. Many teachers still experience difficulties in interpreting educational indicators, reading performance graphs, identifying root causes of problems, and determining priority issues based on the available data. This condition affects teachers' ability to participate actively in the data analysis process.

One informant explained:

"Some teachers still do not understand how to read indicators and determine priorities based on the available data."

This statement indicates that teachers may receive information about DBP but do not always have sufficient technical understanding to use the data independently. As a result, teachers often depend on the school principal or school operator to explain the meaning of the indicators and determine the appropriate follow-up actions.

Limited data literacy can reduce the effectiveness of DBP because data-based planning requires collective participation from teachers, not only from school leaders or administrative staff. If only a small number of individuals understand the data, planning decisions may become centralized and teachers may not fully understand the rationale behind the selected programs. Therefore, continuous training, mentoring, and practical exercises in data analysis are needed to strengthen teachers' data literacy.

Resistance to Change

Resistance to change is another factor that inhibits DBP implementation. Some teachers still rely on conventional planning approaches based on previous experiences, routine annual activities, and established administrative procedures. For some teachers, DBP may be perceived as an additional responsibility because it requires them to analyze data, interpret indicators, and prepare more detailed planning documents.

This resistance may occur because teachers are accustomed to traditional planning practices that are considered simpler and more familiar. Changes in planning procedures require time, adjustment, and continuous support. When teachers perceive DBP as increasing their workload, they may be less motivated to participate actively in data analysis activities.

Resistance to change can slow down the process of building a data-driven organizational culture. Therefore, school leaders need to provide motivation, guidance, and practical examples of how DBP can help teachers develop more effective programs. If teachers understand that data-based planning can reduce ineffective activities and improve program relevance, their willingness to adopt DBP is likely to increase.

Technical Constraints

Technical constraints also hinder the implementation of DBP. These constraints include unstable internet connectivity, limited computer facilities, and insufficient technical assistance. Unstable internet access can make it difficult for teachers and school personnel to

access the Education Report Card platform, particularly when they need to retrieve data, review indicators, or prepare planning documents.

Limited computer facilities also affect teachers' opportunities to access the platform independently. When computers are only available to a small number of staff members, access to educational data becomes concentrated among the school principal and school operator. This condition reduces teachers' direct involvement in reviewing and analyzing the data.

In addition, limited technical assistance may cause difficulties when teachers encounter problems using the platform. Without sufficient guidance, teachers may feel discouraged from using the Education Report Card system. Therefore, improving internet connectivity, increasing the availability of computer facilities, and providing regular technical assistance are necessary to support more effective DBP implementation.

Dependence on Conventional Administrative Planning Practices

The final inhibiting factor is the continued dependence on conventional administrative planning practices. In some cases, school programs are still prepared based on routine annual activities rather than systematic analysis of Education Report Card data. This indicates that DBP has not yet become a fully embedded practice in the school's planning system.

Conventional planning practices are often maintained because they are familiar, easier to implement, and have been used for many years. However, planning based solely on routine activities may not always address the most urgent educational problems faced by the school. As a result, school programs may be less targeted and may not fully reflect the needs identified through educational data.

The dependence on conventional planning also shows that data utilization has not yet been consistently integrated into every stage of school planning. To address this issue, schools need to establish regular data-review meetings, develop school-level SOPs for DBP, and ensure that Education Report Card findings are included in the preparation of school programs and the RKAS. These efforts can help transform DBP from an administrative requirement into a routine and sustainable school management practice.

Table 6. Supporting and Inhibiting Factors of Data-Based Planning Implementation.

Supporting Factors	Explanation	Inhibiting Factors	Explanation
Improving human resource competence	Teachers, school leaders, and administrative staff gradually improve their ability to understand and use Education Report Card data.	Limited data literacy among teachers	Some teachers still have difficulty interpreting indicators, reading graphs, identifying root causes, and determining priorities.
Government policy support	National policies, education office guidance, and school supervisor assistance encourage schools to apply DBP in planning and budgeting.	Resistance to change	Some teachers still prefer conventional planning practices and may perceive DBP as an additional administrative burden.
Technological infrastructure	Computers, internet access, learning accounts, and the Education Report Card platform facilitate access to educational data.	Technical constraints	Unstable internet connectivity, limited computer facilities, and insufficient technical assistance hinder access to and use of the platform.
Emerging data-driven organizational culture	School personnel increasingly use data in meetings, program evaluation, and RKAS preparation.	Dependence on conventional administrative planning practices	Some school programs are still based on routine annual activities rather than systematic data analysis.

(Research Source, 2026).

Overall, the implementation of Data-Based Planning at SMP Negeri Satap Paccarakang has shown positive progress through the availability of policy support, improving human resource competence, technological infrastructure, and the gradual emergence of a data-driven organizational culture. However, the effectiveness of implementation is still constrained by limited teacher data literacy, resistance to change, technical limitations, and conventional planning habits. These findings demonstrate that the success of DBP depends not only on the availability of data and digital platforms but also on the readiness of human

resources, active teacher participation, continuous mentoring, adequate technological support, and the development of an organizational culture that consistently values evidence-based decision-making.

5. Conclusion

Based on the results of the research entitled Implementation of Data-Based Planning through the Utilization of the Education Report Card at SMP Negeri Satap Paccarakang, Luwu Regency, the following conclusions can be drawn: the implementation of Data-Based Planning (DBP) through the utilization of the Education Report Card at SMP Negeri Satap Paccarakang has been carried out relatively well, although it has not yet reached an optimal level. This is reflected in the communication process conducted through socialization activities, school meetings, and supervisory assistance, although teachers' understanding of educational quality indicators remains varied. In terms of resources, the school has adequate supporting facilities and access to the Education Report Card Platform; however, limited teacher data literacy and internet connectivity remain significant challenges. From the disposition aspect, the principal and teachers generally demonstrate positive attitudes toward the use of data in planning, although some still perceive DBP merely as an administrative requirement. Meanwhile, from the bureaucratic structure perspective, DBP implementation has not yet been supported by a specific Standard Operating Procedure (SOP) or a clearly defined division of responsibilities for school data management. Supporting factors include the gradual improvement of human resource competencies, government policy support, the availability of technological infrastructure, and the emergence of an organizational culture that increasingly encourages the use of data in school decision-making. Nevertheless, several inhibiting factors remain, including limited teacher data literacy, resistance to changes in established work patterns, technical constraints related to facilities and mentoring support, and continued dependence on conventional administrative practices. Therefore, efforts to improve the effectiveness of DBP implementation should focus on strengthening teachers' data literacy through continuous training and mentoring, developing specific SOPs, clarifying the division of responsibilities in school data management, improving technological infrastructure, and fostering a sustainable data-driven organizational culture. Through these efforts, the Education Report Card can be utilized more effectively to support evidence-based planning and improve educational quality at the school level.

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