



# Data-Based Planning Using Educational Reports in Improving Literacy

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**Abstract:** One of the efforts to improve the quality of education is planning according to the needs of the school. The education unit has an education report card in which there is information about quality indicators based on the National Assessment (AN) which is carried out every year where the results of the AN are described in the education report card which contains the report of the education unit as a whole starting from Numeracy Literacy, Instructional Leadership of school principals, educators and education personnel, and learning environment etc. Education units in Nusa Tenggara Province in general and in Mataram City in particular have implemented data-based planning (PBD), but it is not optimal because the program is relatively new. In the education report card, there are recommendations that are referred to as the preparation of the School Activity Plan and Budget (RKAS) in which there is a priority scale of recommended programs/activities such as improving teacher competence, increasing literacy and numeracy, strengthening character education and structuring the school environment. Through Community Service (PKM), in this case to junior high school education units, socialization programs/activities are needed through workshops with the theme of data-based planning.

**Keywords:** Data-based planning; Education report cards; Literacy

## Introduction

Data-Driven Planning (known with PBD) is a type of planning process that is based on available data and information. In PBD relevant facts are used as a starting point to generate more accurate and effective conclusions. Through the use of appropriate data, data-driven insights can help educational units or schools achieve their goals more effectively. Data-driven planning knowledge can help schools by enabling them to extract valuable, practical, and actionable insights from data, which has become essential for the survival and development of educational institutions. Data-driven planning is a valuable tool that schools can use to improve the quality of education in terms of literacy, manage the environment and legitimacy of schools in encouraging high-quality decision-making, and develop and maintain dynamic capabilities (Yue, 2023).

In addition, data-driven planning driven by educational report card data allows for a more comprehensive analysis of trends and patterns present

in the data, allowing it to identify potential issues that may arise in the future. Thus, PBD not only helps in the development of current projects, but also helps in developing strategies to address potential issues that may arise in the future. By using this approach, schools can become more responsive and adaptable to the ever-changing environment.

Through in-depth analysis of data, researchers can identify trends and patterns that may not be immediately apparent. This allows them to formulate more effective strategies to address challenges that may arise in the future. (S. et al., 2023) Thus, data-driven research not only provides insight into current conditions but also helps in planning the right steps for the future (Untari, 2022.). Thus, organizations or businesses can gain greater competitive advantage and become more resilient in the face of continuous change.

Because the implementation of Data-Based Planning is relatively new, Researchers from the University of Mataram held this PBD strengthening through a workshop in collaboration with the Technical

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Implementation Unit of the Ministry of Education, Culture, Research and Technology, namely the Balai Guru Penggerak (BGP) of West Nusa Tenggara Province. In this activity, they invited 20 junior high school level education units throughout Mataram City and at the same time evaluated the results of the socialization and literacy and numeracy interventions held the previous year by looking at the 2023 education report card so that they could see the success and benefits of community service (known with PKM) in 2023.

With data planning, organizations can identify trends and patterns that may not be immediately visible (Mundayati, 2022). This allows them to formulate more effective strategies in dealing with challenges that may arise in the future. Thus, data-based research not only provides insight into current conditions but also helps in planning the right steps for the future. Thus, schools gain a greater competitive advantage and become more resilient in the face of continuous change.

In addition, data-driven research also allows schools to identify new opportunities that may have gone undetected before. With in-depth analysis of data, they can find trends, changing literacy preferences, or even potential strategic partnerships that can improve the quality of education through literacy. According to Amri & Rochmah, (2021) Indonesia's literacy rate is still far from what the government expects. Literacy has not yet become a habit and culture of the Indonesian people. Thus, data-based planning is not only useful for understanding current conditions, but also to help improve literacy and schools prepare for future challenges and changes.

Data-driven planning is essential for educational units to stay ahead of the competition and improve literacy. By using data analysis, schools can obtain the right implementation according to the recommendations in the education report, which has the potential to improve the quality of education. This proactive approach allows schools to make informed decisions and position themselves strategically for the school's future success. Essentially, this data-driven planning is not only about understanding the current education report, but also about preparing for the future.

As technologies continue to advance and data becomes more abundant, the importance of effective data-driven planning becomes increasingly clear. Data-driven planning involves the strategic collection, analysis, and use of data to drive decisions that support the achievement of school goals (Zahir and Umar, 2023). This requires careful consideration of data sources, data quality, data governance, and data security to ensure that the insights generated are accurate, reliable, and actionable. Without a data-driven planning strategy that

is consistent with the Education report, schools are making decisions that are already recommended.

## Method

Community Service Activities (PKM) in collaboration with the partner of the Teacher Leaders Center (BGP) of West Nusa Tenggara Province. The workshop participants were junior high school (SMP) principals throughout Mataram City who had received Literacy and Numeracy strengthening interventions in 2023, while the implementation process was on Tuesday, May 27, 2024 starting at 08:00 to 14:00 WITA with resource persons Widya Pradi BGP, BPMP and the Principal of SMPN 10 Kota Mataram because the school is an implementing school mover (PSP) with good Literacy achievements in 2024.

Data on participants in the Data-Based Planning Workshop Using Educational Reports in Improving Literacy were taken from the Center for Leading Teachers and the Center for Education Quality Assurance of West Nusa Tenggara Province, considering that the participants had received previous strengthening interventions from PKM in 2023,

## Result and Discussion

### *Benefits of Data-Driven Planning*

In making decisions, increasing operational efficiency, better risk management, and increasing innovation. By having a solid data-driven planning strategy, schools can ensure that they are using their data effectively to drive improvements in the quality of Education. In addition, data-driven planning helps to establish a clear roadmap for how data will be collected, analyzed, and used within the Education unit ensuring that all stakeholders are aligned and working towards the same goal. Ultimately, data-driven planning is essential for schools looking to improve literacy quality based on Education report cards.

With data-based planning as the main source of ARKAS, schools can optimize the use of their educational report card data to improve literacy. With a clear roadmap, schools can organize how data is collected, analyzed, and utilized effectively, so that all parties involved can work together towards the same goal. Overall, data-based planning is an important key to improving the quality of educational units, in the digital era that is highly dependent on data or educational report cards.

### *Better decision making process*

By having better access to relevant and accurate data, principals can make better and faster decisions.

This allows the company to respond to the reflection of the Education report card more flexibly and create policies or services that are more in line with the needs of the school. Thus, good data-based planning not only helps improve operational efficiency, but also allows schools to remain quality and competitive.

With good data-based planning, schools can also identify the Education report card as a basis for creating programs or activities based on proper analysis. By using education report card data to inform strategic decisions, schools to stakeholders gain a significant competitive advantage in student literacy. There are several ways to evaluate the intended relationship between selected system-level conditions and conceptually connected school characteristics, ranging from "real implementation" to different approaches. Autonomy, defined as the influence of school discretion in accordance with the restrictions of national-level laws, is the most obvious example of simple implementation. Although it is expected that schools will follow national regulations, the actual pattern of autonomy as determined by the schools themselves may still deviate because these restrictions may differ in how explicit they are and may not be closely monitored. Hans Luyten, et. al (2014). Inseparable from effective data-based planning can also help schools reduce risk gaps and optimize teacher performance according to the recommendations suggested in the education report card. Thus, the

program to improve refers to the recommendations of the education report card in data-based planning can bring significant long-term benefits to improving the quality of education, especially literacy and numeracy indicators.

*Discussion on Improving Literacy in Junior High Schools (SMP) in Mataram City*

In this discussion are the results of community service activities (PKM) in 2023. This can also be seen increasing and decreasing literacy scores in junior high schools that received intervention and socialization on how to improve literacy scores in their respective schools. By ensuring that the data used is reliable and up-to-date, schools through Education report cards. From 46 junior high schools in Mataram City, we took a sample of 10 SMPNs to be discussed. In this discussion we present data based on the 2023 and 2024 education report cards. The purpose of the education report card is to assess student achievement at the local and national levels. The education report card functions as an indicator of the quality of school and regional education from various perspectives of education indicators. From this education report card, it can be seen how students' knowledge and skills are in the aspects of literacy and numeracy, character and the quality of the learning environment as follows:

**Table 1.** Education Report and Literacy Information of Mataram City Middle Schools

School Name	Report Achievements	Year 2023	Year 2024	Change	Achievements	Improvement Recommendations
SMPN 09	Currently	66.22	68.89	6.67	Go on	GTK competencies that support cognitive activities
SMPN 10	Good	66.22	75.56	13.34	Go on	GTK competencies that support reflection on teaching practice
SMPN 11	Currently	60	53.33	6.67	Down	Teacher competence in text reading policy
SMPN 15	Good	86.67	97.78	11.11	Go on	Teacher competence in text reading policy
SMPN 16	Good	71.11	46.67	24.44	Go on	Teacher competence in reading texts
SMPN 17	Currently	44.44	38.64	5.80	Go on	GTK competency in reading literary texts
SMPN 21	Currently	59.38	40	19.38	Go on	GTK competencies in reading literary texts, and cognitive activities
SMPN 22	Currently	48.57	69.44	20.87	Down	GTK competencies in reading literary texts, and cognitive activities
SMPN 23	Currently	55.56	56.67	1.11	Down	GTK competencies that support the preparation and implementation of visions and missions, class management, curriculum, literary text reading competencies, and information.
SMPN 24	Currently	45.16	59.26	14.10	Down	GTK competencies and policies that support class management and implementation of the school's vision and mission, innovative practices.

Source: PBD Education Report Data from 2024 research sampling schools

Based on table 1 above, it shows that overall achievement has increased by 3 good junior high schools

and 7 moderate, students have achieved minimum competency. The increase was an average of 13.46, but

there were 4 junior high schools whose achievement decreased from 2023 to 2024, an average of 10.56 compared to the previous year. This decrease was due to the ability of teachers in learning so that the Education report card recommends that there be a policy for school principals to prioritize improving the competence of educators and education personnel (known with GTK) in supporting reading literary texts.

In the recommendations on the Education report in general, namely: Improving GTK competencies and policies that support class management, cognitive activities, curriculum management, competencies in reading literary texts and information and the implementation of the school's vision and mission, supporting the implementation of innovative practices. These recommendations are implemented through more specific activities, namely:

1. Heads of educational units and educators learn about the formulation, delivery and implementation of the school's vision and mission to support literacy skills.
2. The head of the educational unit formulates the school's vision and mission to improve the literacy learning process for students by involving the entire school community.
3. The head of the educational unit encourages improvements to the school's vision and mission in the educational unit through programs, policies and budgeting."

Improving instructional leadership competency through Regular BOS activities with Data-Based Planning (PBD) as outlined in ARKAS in improving the quality of education, especially literacy, namely: (1) Preparation of educational unit program planning (school vision and mission, RKJM, RKT, RKAS); (2) Improving the competence of school principals; (3) Development and implementation of the principal's work program.

Improvement of GTK competency and policies that support the preparation and implementation of the school's vision and mission. Inspiration for activities that need to be improved:

1. Heads of educational units and educators learn about the formulation, delivery and implementation of the school's vision and mission to support the school's security climate.
2. The head of the educational unit formulates the school's vision and mission to improve the learning process that supports the security of the educational unit by involving all members of the school community.
3. The head of the educational unit encourages improvements to the school's vision and mission in the educational unit through programs, policies and budgeting.

Regular BOS Activities: (1) Preparation of educational unit program planning (school vision and mission, RKJM, RKT, RKAS); (2) Improving the competence of school principals; (3) Development and implementation of the principal's work program.

In addition to teachers who need to improve their teaching competencies, the principal as a visionary instructional leader who consistently refers to the vision and mission of the educational unit, including communicating the vision and mission to the educational unit community, so that learning planning, practice and assessment are oriented towards improving student learning outcomes through program support, incentive systems or adequate resources that have an impact on the culture of teachers reflecting and improving learning.

#### *Workshop activities in Data-Based Planning*

Identifying school data needs and objectives for data-based planning (PBD) workshop activities by looking at the 2023 and 2024 Education report cards and develop a data collection and analysis plan as material for implementing policies and procedures in creating activities or programs to improve literacy in each school.

Monitor and evaluate the quality and effectiveness of school data to be improved based on the Education report card. Make adjustments and improvements as needed to ensure data-based planning is in line with the school's goals and vision and mission. By following these steps, the recommendations listed in the Company's Education report card and can leverage the power of data to drive decision-making to further implement school policies. The implementation of the Work Shop was on May 27, 2024 at the West Nusa Tenggara Province Teacher Leaders Center.

#### *Collect Documentation of Data-Based Planning Workshop Activities as Follows*

Data-driven planning is essential to ensure that the good practices that schools demonstrate are implemented effectively. Without proper data planning, schools can face obstacles such as data integration issues, resource constraints, and compliance difficulties. By addressing these challenges and developing a comprehensive data management strategy, schools can streamline their data management processes and maximize the benefits of educational reports as their data assets. Clearly, data-driven planning is essential to achieving success in improving the quality of education, one of which is improving literacy. Image of decision makers (Junior High School Principals throughout Mataram City).





Figure 1. Implementation of Community Service Activities

## Conclusion

In this article, it is clear that effective data-based planning is essential for educational units that want to utilize Education report card data where the principal in making RKAS is based on the recommended priority scale, so that in making strategic decisions and the success of the Education unit is more optimal. The Education Report Card displays the condition of the education unit based on data from the results of national assessments and surveys involving education units and regions. By setting clear goals, creating a detailed roadmap, and prioritizing education quality standards, education units can ensure that data-based management efforts can be successful. It is also important to regularly communicate progress and updates to stakeholders to ensure adjustments to programs or activities. Overall, by following best practices in data-based planning, educational institutions can maximize RKAS with Education report card sources.

Continuing to prioritize programs or activities that originate from the Education report is very important for schools to maintain competitive advantage and improve the quality of Education, namely improving literacy. By setting clear goals, creating a detailed roadmap, and prioritizing recommended standards, they can ensure that their data management efforts are successful. It is also important to regularly communicate progress and improvements in the quality of Education in literacy to the local Education Office. The Education Report can be a reference in data-based planning. Education Units and Local Governments can use the Education Report as a guide to determine problems, consider their causes, and ultimately improve overall teaching standards. In addition, the public can also access the Education Report as a collaborative effort to improve the quality of education. To maximize existing school resources.

Looking to the future, future trends in data-based planning will likely focus on educational report card

results. To improve data analysis and decision-making processes. In addition, there will be a priority scale of activities to be implemented over the next year or one school year, a greater emphasis on literacy improvement activities. In encouraging the success of improving the quality of education, there needs to be adaptation and innovation in data-based planning strategies, the role of the principal to remain competitive in encouraging improvements in the quality of education.

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