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# **Use of Data-Driven Decision Making in Principal Leadership and School Improvement Initiatives in Delta State Mission Schools**

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**ABSTRACT**: This study examined use of data-driven decision making in principal leadership and school improvement initiatives in Delta State mission schools. Three research questions gave the study a direction. The study was a descriptive survey with an ex-post facto design. The population consists of 102 principals and vice-principals, in Delta State Mission schools and purposive sampling technique was adopted since the population was a manageable size, thus there was no sample. The instrument was a questionnaire titled (DDDMPLSIIQ) Data-Driven Decision Making in Principal Leadership and School Improvement Initiatives Questionnaire. The questionnaire was analysed with mean, SD and ranking. Finding shows that the current practices employed by principals in Delta State Mission schools in utilizing data-driven decision making for school improvement initiatives include; use data to monitor progress towards the school improvement goals, address achievement disparities by using data among others. The study also revealed that challenges faced by principals in implementing data-driven decision making in their leadership practices within the Delta State Mission school comprise; integrating data-driven decision making into existing systems and practices, limited capacity to use data to identify and address specific student needs and interventions. As such, it was recommended that principals should be provided with adequate training and professional development opportunities to enhance their data literacy skills. This will empower them to effectively collect, analyze, and interpret data and identify specific student needs for targeted interventions.

**KEYWORDS:** data-driven decision making, principal leadership, school improvement initiatives, Delta state mission schools.

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## **INTRODUCTION**

Mission schools are held to high esteem by parents and host communities since they are characterized by their affiliation with religious organizations and commitment to providing quality education (Jegede, 2015; Ekanem, 2017; Nkedishu, 2020). These schools have a longstanding tradition of delivering holistic education that emphasizes moral values, character development, and academic excellence (Akinbote, 2018). As a result, parents often view mission schools as desirable institutions for their children's education due to their reputation for discipline, high standards, and strong academic performance (Njoku & Ezenwafor, 2020). Host communities also value mission schools for their contributions to the social fabric, community development, and the preservation of cultural heritage (Eze, 2019). Furthermore, the involvement of religious organizations in mission schools fosters a sense of trust and accountability among stakeholders. The strong religious foundation of these schools creates an environment where parents and host communities believe that their children's spiritual, moral, and intellectual needs will be adequately addressed (Okeke & Akinnagbe, 2021). This trust stems from the shared values and beliefs between the religious organizations and the local communities, establishing a strong bond that enhances the reputation and support for mission schools (Jegede, 2015).

Principals in mission schools are highly respected due to the crucial role they play in upholding the academic integrity of the school (Afolayan & Akintayo, 2018; Ekundayo, 2020). These principals are seen as the custodians of educational excellence and are entrusted with ensuring that the school maintains high standards of teaching and learning (Afolayan & Akintayo, 2018). Their leadership is vital in creating an environment conducive to academic growth and achievement, as they set clear expectations for both students and teachers (Adeyemi, 2017). In mission schools, principals are often viewed as role models who embody the values and ethos of the institution (Akinnubi & Kusimo, 2018). They are expected to demonstrate ethical behavior, integrity, and a strong commitment to the holistic development of students (Ekundayo, 2020). As leaders, they are responsible for promoting a culture of academic excellence, discipline, and character formation (Akinnubi & Kusimo, 2018). The respect given to principals in mission schools stems from their ability to inspire and motivate teachers, students, and other stakeholders towards achieving educational goals (Adeyemi, 2017). Moreover, the respect for principals in mission schools is also driven by their involvement in community engagement and social development initiatives. Principals are often seen as community leaders who actively participate in local activities, collaborate with community members, and address community concerns (Onyekwere, 2019). This engagement fosters a sense of trust and respect between the school and

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the community, leading to increased support and positive perceptions of the principal's leadership (Onyekwere, 2019).

Principal leadership plays a critical role in driving school improvement initiatives (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Hallinger & Heck, 2010). Effective principals are instrumental in setting a clear vision for the school, creating a positive and inclusive school culture, and implementing strategies that enhance teaching and learning (Robinson, Lloyd, & Rowe, 2008). They serve as instructional leaders who guide teachers' professional development, provide feedback and support, and promote a collaborative and reflective teaching environment (Goddard, Hoy, & Hoy, 2004). By leveraging their leadership skills, principals can foster a culture of continuous improvement and positively impact student achievement (Pounder, Ogawa, & Adams, 1995). Data-driven decision making is a vital component of effective principal leadership and school improvement efforts (Wayman, Cho, & Johnston-Wilder, 2007; Earl & Katz, 2006). Principals who utilize data systematically are better equipped to identify areas of need, monitor progress, and make informed decisions that positively impact student outcomes (Herman, 2013). Data-driven decision making allows principals to analyze student performance, identify achievement gaps, and implement targeted interventions to address specific needs (Datnow & Park, 2017). Additionally, data can inform resource allocation, support the implementation of evidence-based practices, and guide the evaluation of program effectiveness (Datnow & Park, 2017; Hamilton et al., 2009).

Principals employ various practices to utilize data-driven decision making for school improvement initiatives (Supovitz & May, 2019; Marsh, 2017). Principals collect and analyze data on student achievement, attendance, and discipline to identify patterns and trends (Supovitz, 2016). This process allows them to pinpoint areas of strength and areas in need of improvement within their schools (Marsh, 2017). By examining data, principals gain valuable insights into student performance and can tailor instructional strategies and interventions accordingly (Marsh, 2017; Supovitz & May, 2019). Principals collaborate with teachers and other stakeholders to establish data teams or professional learning communities dedicated to analyzing and interpreting data (Wayman et al., 2007; Supovitz, 2016). These teams engage in regular data discussions, where they collectively make sense of the data, identify root causes of challenges, and develop action plans for improvement (Wayman et al., 2007; Supovitz & May, 2019). Through collaborative inquiry, principals encourage teacher ownership of the data and foster a culture of shared responsibility for student achievement (Supovitz & May, 2019). Principals use data to set specific and measurable goals for school improvement (Supovitz, 2016). By aligning data with their school's vision and goals, principals establish clear targets that guide the direction of improvement efforts (Supovitz, 2016; Marsh, 2017). These goals serve as benchmarks for progress monitoring and provide a focus for instructional decision making (Marsh, 2017).

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Principals utilize data to allocate resources effectively (Supovitz, 2016). By examining data on student needs, they can distribute resources, such as staffing, professional development, and instructional materials, in a targeted and equitable manner (Supovitz, 2016; Marsh, 2017). Principals engage in ongoing professional development to enhance their data literacy skills (Wayman et al., 2007). Training programs provide principals with the knowledge and skills needed to effectively interpret and use data for decision making (Supovitz, 2016). These programs empower principals to develop a deep understanding of data analysis techniques and support their capacity to lead data-driven school improvement initiatives (Wayman et al., 2007). Principals utilize technology and data systems to streamline data collection and analysis processes (Marsh, 2017). By leveraging data management tools, principals can access real-time data, generate reports, and visualize data trends, making it easier to identify areas of concern and make timely decisions (Marsh, 2017; Supovitz & May, 2019). Principals foster a culture of continuous improvement by utilizing data to monitor the impact of interventions and adjust strategies as needed (Supovitz & May, 2019). By regularly reviewing and reflecting on data, principals ensure that their improvement efforts remain focused and responsive to the evolving needs of students and teachers (Supovitz & May, 2019).

The perceived impact of data-driven decision making on school improvement outcomes is widely recognized in educational research and practice. Principals, teachers, and educational stakeholders view data-driven decision making as a powerful tool for improving instructional practices, enhancing student learning, and driving overall school improvement (Marsh & Pane, 2017; Hamilton et al., 2009). Through the systematic analysis and utilization of data, schools can identify areas of improvement, monitor progress, and implement evidence-based strategies that lead to positive outcomes for students. One significant perceived impact of data-driven decision making is the ability to identify and address student needs more effectively. By analyzing student performance data, educators can gain insights into individual strengths and areas for growth, enabling them to tailor instruction and interventions to meet the diverse needs of students (Wayman, 2005; Supovitz & May, 2010). This targeted approach helps to bridge achievement gaps, improve student engagement, and promote academic growth (Marsh & Pane, 2017). Moreover, data-driven decision making facilitates the evaluation of instructional initiatives and interventions, allowing educators to monitor the effectiveness of their practices and make adjustments as needed (Wayman, 2005; Hamilton et al., 2009). By examining data on program implementation and student outcomes, schools can ensure that their improvement efforts are aligned with evidence-based practices and yielding desired results. Furthermore, data-driven decision making has a perceived impact on school-wide improvement processes and resource allocation. Principals and educational leaders can utilize data to guide strategic planning, target resources to areas of greatest need, and allocate funding and staffing based on data-informed

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decisions (Marsh & Pane, 2017; Wayman, 2005). This approach enhances the efficient use of resources and ensures that interventions and supports are effectively aligned with student needs (Supovitz & May, 2010). Additionally, data-driven decision making fosters a culture of continuous improvement and accountability (Marsh & Pane, 2017). By regularly examining and discussing data, educators engage in reflective practices, collaborate to identify areas for growth, and take collective responsibility for student outcomes (Wayman, 2005; Supovitz & May, 2010).

Despite the recognized importance of data-driven decision making, there are challenges that principals encounter in effectively utilizing data for school improvement (Supovitz, 2016; Marsh, 2017). These challenges include limited access to timely and relevant data, lack of data literacy skills, and insufficient professional development opportunities for principals to enhance their data-driven decision-making practices (Supovitz, 2016; Marsh, 2017). Moreover, organizational and contextual factors, such as time constraints, competing priorities, and resource limitations, can impede the successful implementation of data-driven practices (Marsh, 2017; Wayman et al., 2007). Therefore, it is essential to support principals in developing their data literacy skills and creating a supportive school culture that values data use for decision making (Hamilton et al., 2009). Professional development programs that focus on data analysis, interpretation, and utilization can empower principals to make evidence-based decisions and lead effective school improvement initiatives (Wayman et al., 2007; Marsh, 2017). Furthermore, providing principals with access to high-quality, timely data, along with user-friendly data systems, can facilitate their use of data for continuous improvement (Supovitz, 2016; Earl, & Katz, 2006).

### **Statement of the Problem**

Despite the growing recognition of the importance of data in driving effective decision making, many principals in these schools seems not to be adequately equipped with the knowledge, skills, and resources to collect, analyze, and interpret relevant data. This deficiency hinders their ability to make informed decisions that can positively impact student achievement, teacher effectiveness, and overall school improvement. As a result, there is a pressing need to address this issue by developing comprehensive strategies that promote the integration of data-driven decision making practices within the leadership framework of Delta State Mission schools, enabling principals to effectively leverage data to drive evidence-based decision making and support school improvement efforts. Understanding the current state of data-driven decision making in these schools is crucial for developing targeted interventions and providing support to principals, enabling them to lead effectively and facilitate meaningful school improvement in Delta State Mission schools. The problem at hand therefore, is the use of data-driven decision

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making in principal leadership and school improvement initiatives within Delta State Mission schools.

# **Research Questions**

The following questions were raised;

- 1. What are the current practices employed by principals in Delta State Mission schools in utilizing data-driven decision making for school improvement initiatives?
- 2. What is the perceived impact of data-driven decision making on school improvement outcomes in Delta State Mission schools?
- 3. What are the challenges faced by principals in implementing data-driven decision making in their leadership practices within the Delta State Mission school?

### **METHODS**

The study being conducted is a descriptive survey with an ex-post facto design. A descriptive survey aims to gather information and describe the current status, characteristics, or opinions of a specific group or population. In this case, the survey focuses on use of data-driven decision making in principal leadership and school improvement initiatives particularly in Delta State Mission schools. The population consists of 102 principals and vice-principals, in Delta State Mission schools and purposive sampling technique was adopted since the population was a manageable size, thus there was no sample. The instrument was a questionnaire titled (DDDMPLSIIQ) Data-Driven Decision Making in Principal Leadership and School Improvement Initiatives Questionnaire, which contained 26 items. The questionnaire was specifically designed to measure the objectives of the study. Respondents were expected to rate in 4ponit scale of Strongly Agree, Agree, Disagree, and Strongly Disagree which was coded as 1, 2, 3, and 4 respectively. The reliability of the instrument was established through split-half test using 10 respondents and a coefficient of 0.73 was obtained. The questionnaire was analysed with mean, SD and ranking.

#### **RESULTS**

**Research Question 1:** What are the current practices employed by principals in Delta State Mission schools in utilizing data-driven decision making for school improvement initiatives

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Table 1: Mean rating, SD and ranking on current practices employed by principals in utilizing data-driven decision making for school improvement initiatives

S/N	Current practices employed by principals in	Mean	SD	Rank	Remark
	utilizing data-driven decision making for school improvement initiatives				
1.	Use data to monitor progress towards the school improvement goals	2.74	1.13	1 <sup>st</sup>	+
2.	Address achievement disparities by using data	2.72	1.15	2 <sup>nd</sup>	+
3.	Involve teachers in data collection process	2.69	1.10	3 <sup>rd</sup>	+
4.	Ensure that the data collected are accurate	2.68	1.06	4 <sup>th</sup>	+
5.	Help instructors learn data literacy	2.67	1.03	5 <sup>th</sup>	+
6.	Identify trends in making informed decisions about instructional strategies	2.67	1.12	5 <sup>th</sup>	+
7.	Systematically organise/store data for easy access/retrieval.	2.66	1.15	7 <sup>th</sup>	+
8.	Use of various types of data (e.g., student performance, attendance, behavior) to inform decision making.	2.55	1.07	8 <sup>th</sup>	+
9.	Analyse data to develop instructional strategy	2.55	1.06	8 <sup>th</sup>	+

+ = Agree - = Disagree

Table 1 presents the mean rating, standard deviation (SD), ranking, and remarks for different current practices employed by principals in utilizing data-driven decision making for school improvement initiatives. Use data to monitor progress towards the school improvement goals received the highest mean rating of 2.74, and ranked 1st among the listed practices, address achievement disparities by using data had a mean rating of 2.72 and ranked 2<sup>nd</sup>, involve teachers in the data collection process reported a mean rating of 2.69 and ranked 3<sup>rd</sup>, ensure that the data collected are accurate received a mean rating of 2.68 and ranked 4th, help instructors learn data literacy and identify trends in making informed decision about instructional strategies reported a mean rating of 2.67 and ranked 5<sup>th</sup> tied, systematically organize/store data for easy access/retrieval reported a mean rating of 2.66 and ranked 7th, use various types of data (e.g., student performance, attendance, behavior) to inform decision making had a mean rating of 2.55, and ranked 8th and analyze data to develop instructional strategy received a mean rating of 2.55, similar to the previous practice and ranked 8th, tied, thus, all items received a positive remark. Conclusively, the current practices employed by principals in Delta State Mission schools in utilizing data-driven decision making for school improvement initiatives include; use data to monitor progress towards the school improvement goals, address achievement disparities by

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using data, involve teachers in data collection process, ensure that the data collected are accurate, help instructors learn data literacy, identify trends in making informed decisions about instructional strategies, systematically organise/store data for easy access/retrieval, use of various types of data (e.g., student performance, attendance, behavior) to inform decision making and analyse data to develop instructional strategy.

**Research Question 2:** What is the perceived impact of data-driven decision making on school improvement outcomes in Delta State Mission schools?

Table 2: Mean rating, SD and ranking on perceived impact of data-driven decision making on school improvement outcomes

S/N	Perceived impact of data-driven decision making on	Mean	SD	Rank	Remark
	school improvement outcomes				
1.	Improve overall academic performance of students in the	2.86	1.11	1 <sup>st</sup>	+
	school.				
2.	Contributed to a more personalized and targeted approach	2.78	1.04	$2^{\text{nd}}$	+
	to student support and interventions.				
3.	Improved teacher collaboration and shared accountability	2.77	1.06	$3^{rd}$	+
	in the school.				
4.	Led to improved student achievement in specific subject	2.75	1.02	$4^{th}$	+
	areas (e.g., math, reading).				
5.	Enhanced the efficiency and effectiveness of school	2.72	1.07	5 <sup>th</sup>	+
	improvement initiatives.				
6.	Improved the decision-making process for allocating	2.67	1.06	$6^{th}$	+
	resources in the school.				
7.	Influenced the overall school culture and climate.	2.66	1.11	$7^{ m th}$	+
8.	Address achievement gaps among different student groups	2.65	1.07	8 <sup>th</sup>	+
	(e.g., gender, ethnicity, socioeconomic status).				
9.	Identify effective instructional strategies and interventions.	2.57	1.07	9 <sup>th</sup>	+

+ = Agree - = Disagree

Table 2 presents the mean rating, standard deviation (SD), ranking, and remarks for the perceived impact of data-driven decision making on school improvement outcomes. The mean rating showed that respondents agree on all the item with mean rating of 2.86, 2.78, 2.77, 2.75, 2.72, 2.67, 2.66, 2.65 and 2.57 on improve overall academic performance of students in the school, contributed to a more personalized and targeted approach to student support and interventions, improved teacher collaboration and shared accountability in the school, led to improved student achievement in specific subject areas (e.g., math, reading), enhanced the efficiency and effectiveness of school improvement initiatives, improved the decision-making process for allocating resources in the school, influenced the overall school culture and climate,

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address achievement gaps among different student groups (e.g., gender, ethnicity, socioeconomic status) and identify effective instructional strategies and interventions, with ranking of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> respectively. Thus, the perceived impact of data-driven decision making on school improvement outcomes in Delta State Mission schools include; improve overall academic performance of students in the school, contributed to a more personalized and targeted approach to student support and interventions, improved teacher collaboration and shared accountability in the school, led to improved student achievement in specific subject areas (e.g., math, reading), enhanced the efficiency and effectiveness of school improvement initiatives, improved the decision-making process for allocating resources in the school, influenced the overall school culture and climate, address achievement gaps among different student groups (e.g., gender, ethnicity, socioeconomic status) and identify effective instructional strategies and interventions.

**Research Question 3:** What are the challenges faced by principals in implementing data-driven decision making in their leadership practices within the Delta State Mission school?

Table 3: Mean rating, SD and ranking on challenges faced by principals in implementing data-driven decision making in their leadership practices

S/N	Challenges faced by principals in implementing data-	Mean	SD	Rank	Remark
	driven decision making in their leadership practices				
1.	Integrating data-driven decision making into existing systems and practices.	2.75	1.04	1 <sup>st</sup>	+
2.	Limited capacity to use data to identify and address specific student needs and interventions.	2.71	1.17	2 <sup>nd</sup>	+
3.	Concerns regarding student privacy and ethical use of data	2.66	1.01	3 <sup>rd</sup>	+
4.	Resistance to change.	2.65	1.10	4 <sup>th</sup>	+
5.	Limited access to high-quality/relevant data	2.60	1.07	5 <sup>th</sup>	+
6.	Difficulty in aligning data-driven decision making with the overall vision and goals of the school.	2.54	1.12	6 <sup>th</sup>	+
7.	Insufficient training and professional development opportunities for principals to develop data literacy skills.	2.51	1.04	$7^{\mathrm{th}}$	+
8.	Lack of time/resources to collect, analyze, and interpret data	2.50	1.06	8 <sup>th</sup>	+

+ = Agree - = Disagree

Table 3 presents the mean rating, standard deviation (SD), ranking, and remarks for the challenges faced by principals in implementing data-driven decision making in their leadership practices. Result shows that respondents agree on integrating data-driven decision making into existing systems and practices, limited capacity to use data to identify and address specific student needs and interventions, concerns regarding student privacy and ethical use of data,

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resistance to change, limited access to high-quality/relevant data, difficulty in aligning data-driven decision making with the overall vision and goals of the school, insufficient training and professional development opportunities for principals to develop data literacy skills, and lack of time/resources to collect, analyze, and interpret data with mean rating of 2.75, 2.71, 2.66, 2.65, 2.60, 2.54, 2.51 and 2.50 and ranked 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> respectively. Summarily, the challenges faced by principals in implementing data-driven decision making in their leadership practices within the Delta State Mission school comprise; integrating data-driven decision making into existing systems and practices, limited capacity to use data to identify and address specific student needs and interventions, concerns regarding student privacy and ethical use of data, resistance to change, limited access to high-quality/relevant data, difficulty in aligning data-driven decision making with the overall vision and goals of the school, insufficient training and professional development opportunities for principals to develop data literacy skills, and lack of time/resources to collect, analyze, and interpret data.

# **DISCUSSION**

Finding shows that the current practices employed by principals in Delta State Mission schools in utilizing data-driven decision making for school improvement initiatives include; use data to monitor progress towards the school improvement goals, address achievement disparities by using data, involve teachers in data collection process, ensure that the data collected are accurate, help instructors learn data literacy, identify trends in making informed decisions about instructional strategies, systematically organise/store data for easy access/retrieval, use of various types of data (e.g., student performance, attendance, behavior) to inform decision making and analyse data to develop instructional strategy. This finding aligns with the research conducted by Supovitz (2016), who found that principals collect and analyze data on student achievement, attendance, and discipline to identify patterns and trends. This practice is crucial as it enables principals to gain insights into the factors influencing student performance and make informed decisions to improve educational outcomes. Furthermore, Wayman et al. (2007) discovered that principals in Delta State Mission schools collaborate with teachers and other stakeholders to establish data teams or professional learning communities dedicated to analyzing and interpreting data. This collaborative approach ensures that multiple perspectives are considered when examining data, facilitating a more comprehensive understanding of students' needs and the effectiveness of instructional strategies. In line with Marsh's research (2017), this finding highlights that principals in Delta State Mission schools align the data collected with their school's vision and goals. By establishing clear targets based on data analysis, principals guide the direction of improvement efforts, ensuring that the data-driven decision making is purposeful and directly contributes to school-wide improvement initiatives. Additionally, the finding supports May's findings (2019) that principals foster a culture of continuous improvement by

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utilizing data to monitor the impact of interventions and adjust strategies as needed. This iterative process allows principals to evaluate the effectiveness of implemented interventions, make data-informed adjustments, and drive ongoing improvement in instructional practices and student outcomes.

Finding shows that the perceived impact of data-driven decision making on school improvement outcomes in Delta State Mission schools include; improve overall academic performance of students in the school, contributed to a more personalized and targeted approach to student support and interventions, improved teacher collaboration and shared accountability in the school, led to improved student achievement in specific subject areas (e.g., math, reading), enhanced the efficiency and effectiveness of school improvement initiatives, improved the decision-making process for allocating resources in the school, influenced the overall school culture and climate, address achievement gaps among different student groups (e.g., gender, ethnicity, socioeconomic status) and identify effective instructional strategies and interventions. This finding aligns with the research conducted by Marsh and Pane (2017), Hamilton et al. (2009), Wayman (2005), and Supovitz and May (2010), who found that principals, teachers, and educational stakeholders view data-driven decision making as a powerful tool for improving instructional practices, enhancing student learning, and driving overall school improvement. These authors highlight the positive impact of data-driven decision making on educational outcomes. Through systematic analysis and utilization of data, schools can identify areas of improvement, monitor progress, and implement evidence-based strategies that lead to positive outcomes for students. By examining student performance data, educators gain insights into individual strengths and areas for growth, enabling them to tailor instruction and interventions to meet the diverse needs of students. This personalized approach supports differentiated instruction, leading to improved student engagement, achievement, and overall educational success.

Finding shows that the challenges faced by principals in implementing data-driven decision making in their leadership practices within the Delta State Mission school comprise; integrating data-driven decision making into existing systems and practices, limited capacity to use data to identify and address specific student needs and interventions, concerns regarding student privacy and ethical use of data, resistance to change, limited access to high-quality/relevant data, difficulty in aligning data-driven decision making with the overall vision and goals of the school, insufficient training and professional development opportunities for principals to develop data literacy skills, and lack of time/resources to collect, analyze, and interpret data. This finding supports the research conducted by Supovitz (2016), who found that principals often face challenges related to the availability and accessibility of high-quality data. Inadequate data systems and infrastructure may result in incomplete or inaccurate data, impeding the

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effectiveness of data-driven practices in Delta State Mission schools. The lack of reliable data sources can hinder principals' ability to make informed decisions and develop comprehensive insights into student performance and instructional needs. Furthermore, Marsh (2017) identified that limited access to timely and relevant data can also hinder principals in utilizing data-driven decision making effectively. In some cases, the data may not be readily available or accessible to principals, inhibiting their ability to monitor progress and make timely adjustments to instructional strategies. These challenges can undermine the potential benefits of data-driven decision making in improving school outcomes. Additionally, the finding supports Marsh and Pane's (2017) research, which found that principals may encounter challenges in developing their own data literacy skills. Insufficient training and professional development opportunities in data analysis can impede principals' ability to leverage data effectively for school improvement initiatives. Without adequate knowledge and skills in interpreting and analyzing data, principals may struggle to make accurate and meaningful interpretations, limiting the impact of data-driven decision making.

## **CONCLUSION**

The findings indicate that principals in Delta State Mission schools are utilizing data-driven decision making for school improvement initiatives. They are employing various practices such as monitoring progress, addressing achievement disparities, involving teachers in data collection, ensuring data accuracy, promoting data literacy among instructors, identifying trends, organizing data for easy access, and using different types of data to inform decision making. These practices have resulted in several positive outcomes, including improved academic performance, personalized student support, enhanced teacher collaboration and accountability, subject-specific achievement gains, efficient resource allocation, positive school culture, and addressing achievement gaps. However, principals face challenges in implementing data-driven decision making, including integrating it into existing systems, limited capacity to identify specific student needs, concerns about data privacy, resistance to change, limited access to relevant data, alignment with school goals, insufficient training, and resource constraints.

# Recommendations

Based on these findings, the following recommendations are proposed to enhance the utilization of data-driven decision making in Delta State Mission schools:

1. Capacity Building: Provide principals with adequate training and professional development opportunities to enhance their data literacy skills. This will empower them to effectively collect, analyze, and interpret data and identify specific student needs for targeted interventions.

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- 2. Infrastructure and Resources: Allocate resources and establish systems to ensure principals have access to high-quality and relevant data. This includes investing in technology, data management tools, and data repositories that facilitate easy storage, retrieval, and analysis of data.
- 3. Vision and Goal Alignment: Promote a clear alignment between data-driven decision making and the overall vision and goals of the school. Principals should integrate data-driven practices into existing systems and processes to ensure a seamless integration of data into decision-making processes.
- 4. Ethical Use of Data: Establish guidelines and protocols for the ethical use of student data, addressing concerns about privacy and confidentiality. Ensure that data collection and analysis methods adhere to legal and ethical standards and prioritize student welfare.
- 5. Change Management: Implement strategies to address resistance to change among stakeholders. Foster a culture of openness and transparency, emphasizing the benefits of data-driven decision making and involving teachers and staff in the decision-making process.
- 6. Collaboration and Communication: Encourage collaboration and shared accountability among teachers, administrators, and support staff. Foster a culture of data-driven collaboration and communication, where all stakeholders actively contribute to and benefit from data-driven decision making.
- 7. Monitoring and Evaluation: Continuously monitor and evaluate the impact of data-driven decision making initiatives. Regularly assess the effectiveness of strategies, identify areas for improvement, and make necessary adjustments to optimize the use of data in school improvement efforts.

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