



Principal Leadership in Developing Adaptive Educational Management Culture in Elementary Schools

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ARTICLE INFO	ABSTRACT
Article history: Submitted: April, 28 2026 Final Revised: June, 25 2026 Accepted: July, 03 2026 Published: July, 21 2026 Keywords: Adaptive Management Culture; Educational Management; Elementary School; Principal Leadership.	Purpose: This study aims to analyze how principal leadership contributes to the development of an adaptive educational management culture in elementary schools, particularly in responding to policy changes, learning needs, and the dynamics of school governance. Methods: This study employed a qualitative case study design involving three elementary schools: SD Negeri 2 Baubau, SD Negeri 2 Palatiga, and SD Negeri Palatiga. This study employed a qualitative case study design involving three elementary schools. Fifteen informants, consisting of three principals, nine teachers, and three educational staff members, were selected purposively. Data were collected through in-depth interviews, observation, and documentation, and were analyzed using the interactive model of Miles, Huberman, and Saldaña, which includes data condensation, data display, and conclusion drawing/verification. Findings: The findings reveal that adaptive educational management culture is developed through five interconnected mechanisms: translating the school vision into daily work practices, strengthening participatory communication, involving teachers in decision-making and program implementation, promoting context-based program flexibility, and using reflective evaluation as a space for organizational learning. Research Implications: The study implies that principals need to strengthen collaborative governance, reflective supervision, teacher participation, and context-sensitive decision-making to build schools that are more responsive to institutional and pedagogical change. Originality: This study offers a contextual model of adaptive educational management culture by positioning principal leadership as a cultural and relational practice rather than merely an administrative function. lies in the placement of the principal's leadership as a cultural practice that constructs an adaptive management culture through social relations and organizational learning, not just an administrative function.
	
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INTRODUCTION

Educational changes in the last decade have placed elementary schools in an increasingly complex situation. Schools are no longer solely required to perform administrative functions, but must also be able to respond to curriculum changes, the digitalization of learning, improvements in the quality of educational services, the diverse needs of students, and demands for public accountability. In this changing situation, principal leadership becomes a strategic factor because the principal influences the direction of the organization, work culture, teacher capacity, and the quality of the educational process. Successful school leadership has been shown to influence school improvement not only through administrative control but also through the integration of transformational and instructional practices that gradually shape an improvement-oriented school culture (Day et al., 2016). Principal leadership also contributes to teacher professional learning by strengthening instructional direction, teacher self-efficacy, and collective capacity for improvement (Liu & Hallinger, 2018). Leithwood et al., (2020) emphasize that school leadership contributes to educational quality through establishing direction, developing human capacity, structuring the organization, and strengthening the learning process. Similarly, Daniëls et al., (2019) show that contemporary educational leadership is

not only related to administrative functions, but also the ability to build collaboration, trust, organizational learning, and innovation within the school environment.

Within the framework of educational management, the principal cannot be understood solely as an institutional administrator, but rather as a strategic actor who drives change, builds a shared vision, manages resources, and shapes patterns of interaction among school members. This role is increasingly important because school effectiveness is determined not only by the availability of facilities, curriculum, or formal policies, but also by how the principal embodies the values, norms, communication, and work practices that support educational quality. Recent research on principal leadership confirms that effective leadership works through strengthening teacher capacity, establishing an organizational culture, supporting learning, and creating a conducive school environment (Irfan et al., 2025; Mustari & Nurhayati, 2024).

An adaptive educational management culture closely aligns with the concept of schools as learning organizations. Kools & Stoll (2016) explain that schools as learning organizations are characterized by a shared vision, collective learning, professional collaboration, continuous reflection, and leadership that supports innovation. Kools et al. (2020) also emphasize that schools capable of organizational learning have a greater capacity to adapt to change, use experience as a source of improvement, and develop more responsive work practices.

The need for adaptive leadership and management is growing as educational challenges increase in an era of social and technological change. Adaptive leadership emphasizes the leader's ability to read changes, identify challenges, engage organizational members, and formulate responses relevant to the institution's needs. In the school context, adaptive leadership relates to the principal's ability to create collaborative spaces, support teacher innovation, build organizational resilience, and manage uncertainty productively. Fernandes et al. (2023) demonstrated that the educational crisis situation opens up the need for adaptive spaces in schools, namely spaces that enable principals and teachers to build internal integration and a more cohesive learning environment (Saputra, 2022). Similarly, studies on adaptive leadership in educational institutions emphasize that adaptive leadership is necessary for educational institutions to respond to challenges quickly, appropriately, flexibly, and contextually (Mustari & Nurhayati, 2024).

However, in practice, not all elementary schools have an adaptive management culture. Some schools still face a tendency toward formalistic management, centered on the principal, and emphasizing administrative fulfillment over organizational learning. Decision-making in schools is often not fully participatory; teachers are not always positioned as active subjects in the planning, implementation, and evaluation of school programs. Furthermore, administrative pressures, limited resources, policy changes, and the demands of digitalization often lead schools to respond only to change technically, rather than culturally. This situation suggests that educational management issues in elementary schools cannot be sufficiently explained through formal organizational structures, but need to be understood through the management culture that is alive in the school's daily practices.

Previous studies have extensively discussed principal leadership in relation to teacher performance, graduate quality, learning effectiveness, character development, and strengthening school culture. According to Mustari & Nurhayati (2024), principal instructional leadership demonstrates that principals have a multifaceted role in strengthening learning and shaping student character. Other studies also show that principal leadership is related to school culture, teacher performance, and educational institution governance (Irfan et al., 2025; Dimara et al., 2025). However, most studies still tend to position principal leadership as a variable measured through causal relationships or as a factor influencing performance. As a result, the social process of how principals construct an adaptive educational management culture has not been fully explored.

This gap provides an important foundation for this research. Research on principal leadership needs to move beyond the question of "how much influence" to the question of "how the process of constructing a management culture occurs" in school life. A qualitative approach is necessary because management culture cannot be understood solely through numbers, but also through meaning, experiences, interactions, communication practices, and the dynamics of relationships between actors in schools. Qualitative studies allow researchers to explore principal strategies, teacher involvement, decision-making mechanisms, forms of collaboration, and supporting and inhibiting factors in the formation of an adaptive educational management culture. Qualitative research on principal managerial practices in elementary schools also demonstrates the importance of participatory planning, collaborative organizing, supportive supervision, and reflective evaluation as part of continuous improvement (Septiyani et al., 2026).

The urgency of this research is also related to the position of elementary schools as the initial foundation for the formation of a learning culture, character, academic discipline, and educational governance. Elementary school principals face unique challenges, including managing classroom teachers, young students, communicating with parents, limited resources, and ever-increasing quality demands. In such situations, the success of educational management is determined not only by administrative compliance but also by the school's ability to build an open,

adaptive, collaborative, and learning-oriented work culture. Research on strategic school management shows that integrating a culture of quality and school management is crucial in building excellence in educational institutions (Izzah et al., 2024).

Theoretically, this research lies at the intersection of educational leadership, school organizational culture, and adaptive educational management. Principal leadership is understood as a social practice that shapes values, norms, habits, and orientations for change in schools. School organizational culture is used to understand how management values and practices are formed within the institution, while adaptive management is used to understand the school's ability to respond to changes in policy, learning needs, and the dynamics of the educational environment. Thus, this research examines not only what principals do but also how these leadership actions shape an adaptive management culture within elementary schools.

Recent studies on school leadership also demonstrate the importance of distributed leadership in addressing educational change. Harris & Jones (2020) emphasized that in disruptive situations, school leadership cannot rest on the principal as a single figure but needs to be built through collaboration, communication, and collective responsibility. Mifsud (2024), through a systematic study of distributed leadership, also demonstrated that teacher involvement and the distribution of responsibilities are crucial elements in strengthening school organizational capacity. However, further research is needed on how principals construct an adaptive management culture through communication practices, teacher involvement, program flexibility, and reflective evaluation, particularly in the elementary school context.

Based on this background, this study addresses the following research questions: (1) How do principals develop an adaptive educational management culture in elementary schools? (2) What mechanisms support the formation of adaptive management practices across different elementary school contexts? (3) What supporting and inhibiting factors influence the sustainability of adaptive educational management culture in schools?

This study aims to describe and analyze principal leadership practices in developing an adaptive educational management culture in elementary schools. Specifically, it seeks to identify principals' strategies in shaping adaptive management culture, analyze communication and coordination patterns in school governance, explore teacher and school community involvement in management processes, and examine the supporting and inhibiting factors that influence adaptive management practices. By addressing these objectives, this study is expected to contribute theoretically to educational leadership studies, methodologically to qualitative inquiry on school management practices, and practically to principals, teachers, supervisors, and policymakers in strengthening elementary school governance that is collaborative, responsive, context-sensitive, and sustainable.

METHOD

This research uses a qualitative approach with a case study design. The qualitative approach was chosen because this study aims to deeply understand the leadership practices of school principals in constructing an adaptive educational management culture in elementary schools. The focus of the research is not directed at measuring the relationship between variables, but rather to interpret the processes, strategies, experiences, interactions, and social dynamics that occur in school management practices. A qualitative case study was used because this study seeks to understand the phenomenon of principal leadership in depth in a real institutional context. According to Creswell & Poth (2023), case studies allow researchers to explore a phenomenon through various data sources, while Yin (2017) emphasizes that case studies are relevant when researchers want to understand social processes in a real-life context.

This research was conducted in three elementary schools: SD Negeri 2 Baubau, SD Negeri 2 Palatiga, and SD Negeri Palatiga. These three schools were selected based on the consideration that each school has its own institutional context, management dynamics, and principal leadership practices relevant to understanding the construction of an adaptive educational management culture. The use of three research locations allowed researchers to gain a richer picture of how principals build patterns of communication, coordination, participation, innovation, and institutional responses to change. Thus, this research not only describes leadership practices in one school but also explores variations in management experiences and patterns across several elementary school contexts.

The research informants consisted of 15 people selected purposively. Purposive sampling was used because informants were selected based on their involvement, experience, and knowledge of principal leadership practices and educational management in schools. In qualitative research, informant selection is not based on large numbers, but on the depth of information and the relevance of the informant's experience to the research focus. The informants in this study consisted of three principals, nine teachers, and three educational staff or school elements who understood daily management practices. Each school involved five informants: one principal, three teachers, and one educational staff

or school management support element. This composition was deemed adequate to explore leadership perspectives, teacher experiences, and administrative and coordinative practices in school management.

The informant criteria were determined based on several considerations. First, the informant had direct experience in school management practices. Second, the informant was involved in the planning, implementation, coordination, or evaluation of school programs. Third, the informant understood the principal's leadership patterns, work culture, communication mechanisms, and the dynamics of decision-making in the school. Fourth, the informant was willing to provide information openly and voluntarily. Through these criteria, the data obtained is expected to represent the experiences and perspectives of school actors regarding how an adaptive education management culture is constructed in elementary school life.

Data collection was conducted through in-depth interviews, observation, and documentation. In-depth interviews were used to explore informants' views, experiences, strategies, and reflections on principals' leadership practices in building an adaptive management culture. Interviews were semi-structured to provide clear guidelines for questions, while still allowing informants to explain their experiences broadly and contextually. The focus of the interviews included principals' strategies in building a work culture, communication and coordination patterns, decision-making mechanisms, teacher involvement, school management innovation, responses to policy changes, and supporting and inhibiting factors in the development of an adaptive management culture.

Observations were conducted to directly observe school management practices in daily activities. Aspects observed included the principal's interactions with teachers and education staff, the implementation of school meetings or briefings, formal and informal communication patterns, task distribution, academic supervision, problem solving, and forms of collaboration among school residents in implementing educational programs. These observations were important to ensure that data came not only from informant statements but also from actual practices taking place in the school environment. In addition to interviews and observations, this study also used documentation studies to examine relevant school documents, such as the school's vision and mission, school work plan, annual program, meeting minutes, supervision documents, organizational structure, program evaluation reports, and other documents related to educational management.

The primary instrument in this study was the researcher herself. In qualitative research, the researcher acts as the primary instrument because she is directly involved in the process of collecting, organizing, interpreting, and deriving meaning from field data. To maintain the direction of the data collection process, the researcher used supporting instruments in the form of semi-structured interview guidelines, observation sheets, and documentation study guidelines. The interview guidelines were developed based on the research focus, namely the principal's leadership practices, adaptive management culture, communication and coordination patterns, school community involvement, and supporting and inhibiting factors in school management. The observation guidelines were used to directly record school leadership and management practices, while the documentation guidelines were used to identify documents that support the research findings.

Data analysis was conducted using the interactive analysis model of [Miles et al., \(2018\)](#), which includes data condensation, data presentation, and conclusion drawing and verification. In the data condensation stage, all data from interviews, observations, and documentation were selected, simplified, coded, and grouped according to the research focus. This process was carried out by repeatedly reading interview transcripts, marking important statements, compiling initial codes, and grouping codes into thematic categories. In the data presentation stage, the categorized data were arranged in the form of thematic narratives, a matrix of findings, and relevant informant quotes. Data presentation was directed at showing patterns, relationships between categories, and variations in findings across the three schools. In the conclusion drawing and verification stage, the researchers formulated main themes regarding principal strategies, communication culture, teacher collaboration, adaptation mechanisms, and supporting and inhibiting factors in the formation of an adaptive education management culture.

Data validity was maintained through source triangulation, technical triangulation, member checking, and an audit trail. Source triangulation was conducted by comparing information from principals, teachers, and education staff at each school. Technical triangulation was conducted by comparing data obtained through interviews, observations, and documentation. Member checking was conducted by reconfirming the summary of interview results or preliminary findings with informants to ensure the researcher's interpretation did not deviate from the experiences they shared. An audit trail was conducted by systematically keeping records of the research process, starting from the interview guide, field notes, transcripts, supporting documents, coding process, and analytical decisions. This strategy was used to increase the credibility, dependability, confirmability, and traceability of research data ([Bingham, 2023](#); [Nowell et al., 2017](#)).

This study also adheres to ethical research principles. Prior to data collection, the researcher sought approval from the school and informants. Informants were provided with an explanation of the research objectives, the type of data collected, and their right to provide or refuse certain information. Informants' identities were protected by using codes or initials when presenting the data. All data collected was used solely for academic purposes. By adhering to these ethical principles, this research is expected to proceed responsibly, respect informants' rights, and produce scientifically sound findings.

RESULTS

The findings of this study were generated from in-depth interviews, observations, and documentation conducted in three elementary schools: SD Negeri 2 Baubau, SD Negeri 2 Palatiga, and SD Negeri Palatiga. A total of 15 informants participated in the study, consisting of three principals, nine teachers, and three educational staff members. Each school was represented by one principal, three teachers, and one educational staff member. To protect the confidentiality of informants, this study used a coding system. The coding composition is presented in the following table:

Table 1. Composition of Informants and School Context

Location	Code	Informant	Informant Codes	Focus context
SD Negeri 2 Baubau	S1	1 principal, 3 teachers, 1 educational staff member	S1-KS S1-G1 (G2-G3) S1-TK1	Relatively structured management
SD Negeri 2 Palatiga	S2	1 principal, 3 teachers, 1 educational staff member	S2-KS S2-G1 (G2-G3) S2-TK2	Internal collaboration and communication
SD Negeri Palatiga	S3	1 principal, 3 teachers, 1 educational staff member	S3-KS S3-G1 (G2-G3) S3-TK3	Contextual flexibility and limited resources

The analysis produced five major findings. First, adaptive educational management culture was shaped by the principal's ability to translate the school vision into daily work practices. Second, participatory communication functioned as a mechanism for coordination, problem solving, and shared understanding. Third, teacher involvement in planning, decision-making, implementation, and evaluation strengthened collective responsibility. Fourth, program flexibility enabled schools to adapt activities to institutional conditions, teacher readiness, and resource availability. Fifth, reflective evaluation became a space for organizational learning and continuous improvement. These mechanisms did not appear in a uniform way across the three schools, but were shaped by each school's institutional context, leadership pattern, and available resources.

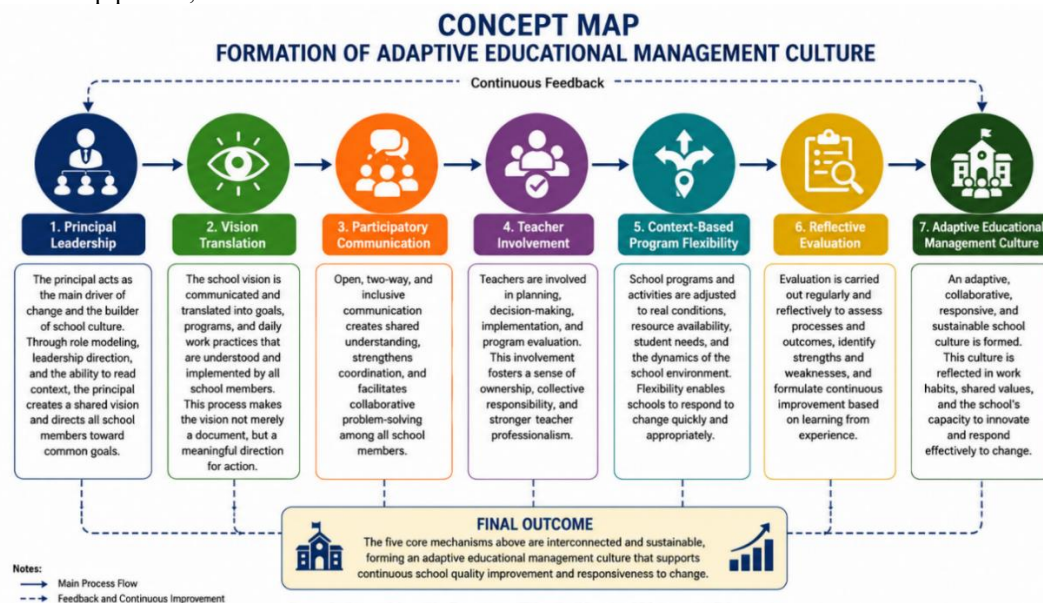


Figure 1. Conceptual Scheme of Adaptive Educational Management Culture Formation

Figure 1 illustrates that adaptive educational management culture is not formed through a single managerial action, but through interconnected leadership practices. The principal's leadership becomes the starting point for translating vision, opening communication, involving teachers, adjusting programs, and developing reflective evaluation. These mechanisms collectively form a school management culture that is more responsive, collaborative, and context-sensitive.

Institutional Context and Management Character of Three Schools

The three schools showed different institutional characteristics in developing adaptive educational management culture. SD Negeri 2 Baubau demonstrated a relatively structured management pattern. This was reflected in clear task allocation, regular meetings, formal coordination, and consistent program implementation. The principal in this school acted as a director of organizational rhythm by ensuring that every school activity had a clear objective, person in charge, and implementation mechanism. However, this structured management did not necessarily indicate rigidity because teachers still had space to discuss technical adjustments when field conditions required flexibility.

SD Negeri 2 Palatiga showed a stronger tendency toward internal collaboration. Management practices in this school relied heavily on communication between the principal, teachers, and educational staff. Coordination was carried out not only through formal meetings but also through informal communication that enabled the school community to respond quickly to emerging problems. In this context, the principal's leadership was visible in the ability to maintain two-way communication, build relational closeness, and encourage teacher participation in school programs.

SD Negeri Palatiga displayed a more contextual management pattern. Limited resources did not prevent the school from developing adaptive work practices. The principal encouraged teachers and educational staff to adjust programs based on teacher readiness, available facilities, and students' conditions. Adaptation in this school was reflected in flexible task allocation, practical problem solving, and the use of available resources to keep school programs running.

Across the three schools, the findings indicate that adaptive management culture was not produced by a uniform model. Each school developed adaptive practices based on its institutional conditions. SD Negeri 2 Baubau emphasized structured coordination, SD Negeri 2 Palatiga emphasized collaborative communication, and SD Negeri Palatiga emphasized contextual flexibility. This variation shows that school adaptability depends not only on formal organizational structures but also on how principals read the context, build communication, involve teachers, and adjust programs to actual school conditions.

Principal Leadership as Director of Vision and Driver of Work Culture

The findings show that principals played a central role in translating school vision into daily work culture. In the three schools, the school vision did not remain merely a formal statement in school documents. It was enacted through meetings, task distribution, supervision, coordination, program implementation, and evaluation. Principal leadership therefore functioned not only as administrative direction but also as a cultural practice that shaped how school members understood goals, responsibilities, and change.

One principal explained:

"A school vision is not enough if it is only written in a document. Teachers must understand the direction of the school's work so that every activity has a clear purpose. Therefore, before a program is implemented, we usually discuss its objectives and who will be responsible." (S1-KS)

This statement indicates that the principal attempted to make the school vision a shared reference for program implementation. When teachers understood the purpose of school activities, they were more likely to view the program as part of collective responsibility rather than merely as an administrative obligation.

A teacher also emphasized the importance of the principal's explanation before school activities were implemented:

"Usually, the principal first explains why the activity needs to be carried out. After that, the division of tasks is discussed. So, teachers do not only receive assignments; they also understand the direction of school activities." (S1-G2)

This quotation shows that principal leadership was not limited to giving instructions. It involved a process of meaning-making through communication. By explaining the purpose of school activities, the principal helped teachers understand their role in school management. This practice contributed to the formation of work culture because teacher involvement was built through shared understanding, not merely through formal orders.

At SD Negeri 2 Baubau, vision translation was more visible in structured work arrangements. The principal ensured that programs were planned, responsibilities were assigned, and implementation mechanisms were clear. At SD Negeri 2 Palatiga, vision translation was more relational and dialogic because the principal often used informal communication to explain program directions and solve problems. At SD Negeri Palatiga, vision translation was more contextual because the principal adjusted school programs to teacher capacity and available resources. One teacher from SD Negeri 2 Palatiga stated:

"The principal often invites us to talk, not always in formal meetings. Sometimes, when there is a small problem, it is discussed together so that a solution can be found quickly." (S2-G1)

Another teacher from SD Negeri Palatiga explained:

"When there is a school program, the principal usually first considers the condition of the teachers and the school. If there are obstacles, the tasks can be adjusted so that the activity can continue." (S3-G3)

These quotations show that adaptive work culture was built through different leadership practices across the three schools. In one school, adaptability emerged through structured planning; in another, through open communication; and in the third, through contextual adjustment. Nevertheless, all three cases demonstrate that principals were key actors in transforming school vision into daily managerial practices.

Participatory Communication and Coordination as the Foundation of School Adaptation

Participatory communication was found to be an important mechanism in shaping adaptive educational management culture. Communication among principals, teachers, and educational staff occurred through formal meetings, daily conversations, personal communication, and digital communication media. These communication channels enabled information to circulate more quickly, problems to be identified earlier, and technical decisions to be discussed more openly.

At SD Negeri 2 Baubau, communication was relatively formal and structured. School meetings were used to explain programs, assign responsibilities, and evaluate activities. One teacher stated:

"When there is a school activity, it is usually explained in a meeting. The principal explains the purpose of the activity, then discusses who is responsible and how it will be implemented." S1-G1)

This statement shows that formal communication played an important role in maintaining management order. Meetings were not only used to deliver information but also to build a shared understanding of objectives, roles, and implementation procedures.

At SD Negeri 2 Palatiga, communication was more fluid. The principal and teachers did not always wait for formal meetings to solve problems. Informal conversations became an important space for immediate coordination. One teacher explained:

"Sometimes, when there is a problem, we talk directly with the principal or other teachers. We do not have to wait for a meeting because if it can be solved immediately, we try to find the solution at that moment." (S2-G2)

This quotation indicates that informal communication functioned as a practical adaptation mechanism. It allowed the school to respond quickly to technical problems without being delayed by formal procedures.

At SD Negeri Palatiga, communication was more personal and contextual. The principal used direct communication to understand teacher readiness and adjust program implementation. One informant stated:

"The principal usually asks about teacher readiness first. If a teacher is not ready to carry out a certain task, an adjustment is usually made so that the activity can still be implemented." (S3-G1)

This finding shows that communication did not only function as a tool for assigning tasks. It also became a way to identify teacher capacity, understand obstacles, and adjust implementation strategies. Communication therefore became a foundation for adaptive coordination.

Coordination also involved educational staff. Their role was important in supporting administration, documentation, and technical preparation. One educational staff member explained:

"Usually, we receive information from the principal or teachers about the activities to be carried out. After that, we help prepare the administration or documents needed." (S1-TK1)

This statement demonstrates that adaptive management culture was not built only by principals and teachers. Educational staff also contributed to program implementation through administrative support. Thus, communication and coordination expanded participation across school members.

Teacher Involvement in Decision Making and Program Implementation

Teacher involvement emerged as another important mechanism in developing adaptive educational management culture. Teachers were not positioned merely as program implementers. They were also involved in planning, task distribution, technical decision-making, implementation, and evaluation. This involvement strengthened a sense of ownership and collective responsibility toward school programs.

At SD Negeri 2 Baubau, teacher involvement was carried out mainly through formal meetings. The principal presented the program plan, and teachers were invited to provide input on technical implementation. One teacher stated:

“Usually, when there is a school program, we discuss it first in a meeting. The principal presents the activity plan, and teachers are asked to give input, especially regarding task distribution and technical implementation.” (S1-G3)

This quotation shows that teachers had space to participate in technical decisions even though the general direction of the program was still initiated by the principal. Teacher input helped the school adjust programs to classroom conditions, student readiness, and practical learning needs.

At SD Negeri 2 Palatiga, teacher involvement was more dialogic and collaborative. Teachers were involved not only in planning but also in solving problems during program implementation. One teacher explained:

“When there is an activity or a problem that needs to be solved, the principal usually invites teachers to discuss it. We can express our opinions, and then we look for the most possible decision to implement.” (S2-G1)

This finding indicates that teachers were treated as actors with practical knowledge. Their experience in classrooms and school activities became an important source for making realistic decisions.

At SD Negeri Palatiga, teacher involvement was closely related to contextual adjustment. The principal considered teachers' capacity, readiness, and time availability before assigning responsibilities. One teacher stated:

“Task distribution is usually adjusted to teachers' abilities. If a teacher has a difficulty, the principal and other teachers usually look for a way so that the activity can still run.” (S3-G2)

This quotation shows that teacher involvement was not merely a formal process. It was also a mechanism for managing limitations through cooperation and flexibility. The school adapted program implementation based on the actual capacity of teachers and available resources.

Teacher involvement also appeared in program evaluation. Teachers were given opportunities to share obstacles, experiences, and suggestions after activities were completed. One teacher stated:

“After an activity is finished, teachers are usually asked what obstacles were faced and what needs to be improved. So, we can share our experiences during the activity.” (S2-G3)

This statement confirms that teacher participation continued beyond implementation. Through evaluation, teachers contributed to identifying program weaknesses and proposing improvements. This process strengthened reflective management and continuous school improvement.

Context-Based Program Flexibility and Management Innovation

The findings indicate that program flexibility and contextual innovation were important indicators of adaptive educational management culture. The three schools faced several challenges, including changes in school agendas, limited resources, administrative workload, different levels of teacher readiness, diverse student needs, and policy demands. These challenges required principals and teachers to avoid rigid management practices and to adjust strategies according to real school conditions.

“School programs are usually planned in advance, but if there are obstacles in the field, the principal gives space for adjustment. For example, the schedule or task distribution can be discussed again so that the activity can continue.” (S1-G2)

This statement indicates that management innovation did not always involve complex technology or large-scale programs. Simple digital communication became a contextual innovation because it accelerated coordination and enabled the school to respond more effectively to changes.

At SD Negeri Palatiga, flexibility was more strongly related to limited resources. The principal adjusted school activities based on available facilities, teacher readiness, and institutional capacity. One informant explained:

"When there is a change in activity, it is usually shared directly through the group. After that, teachers respond, and we decide together what is most possible to do." (S2-G2)

This quote demonstrates that management innovation doesn't always take the form of large-scale programs or the use of complex technology. In this case, the use of simple communication media constitutes a form of contextual innovation because it can accelerate information exchange, streamline coordination processes, and help schools respond to change more effectively. This demonstrates that school adaptability can be built through practical methods tailored to the needs of the school organization.

Meanwhile, at Palatiga Public Elementary School, program flexibility was more evident in adapting activity implementation to resource constraints and teacher readiness. The principal did not force the program to run uniformly, but instead established strategies to ensure activities could be implemented within the school's capacity. Adjustments were made through more realistic task allocation, utilization of available resources, and collaboration among teachers. One informant explained:

"If facilities or personnel are limited, the principal usually invites teachers to find the most possible way. Not everything has to be ideal; the important thing is that the activity can still run and the school's objectives can be achieved." (S3-G1)

This finding shows that flexibility became a strategy for managing limitations. The principal did not treat limited resources as a reason to stop programs, but as a basis for formulating more realistic and contextual strategies.

Educational staff also supported contextual innovation by helping teachers manage administrative tasks. One educational staff member stated:

"Sometimes school activities are adjusted to the situation. If documents or administration need to be prepared, we help so that teachers can still focus on learning activities." (S2-TK)

This quotation shows that adaptive management involved functional role sharing. Educational staff supported program continuity by reducing administrative burdens and helping teachers focus on learning-related activities.

Reflective Evaluation and Learning of School Organizations

Reflective evaluation was found to be a key mechanism in developing adaptive educational management culture. Evaluation was not only used to check whether programs had been implemented. It also functioned as a space to identify obstacles, assess effectiveness, improve strategies, and build shared awareness of school improvement.

At SD Negeri 2 Baubau, evaluation was conducted in a more structured way through meetings, document review, and follow-up discussions. One teacher stated:

"After a school activity is completed, there is usually an evaluation. The principal asks what went well and what still needs improvement, then we discuss what should be improved for the next activity." (S1-G1)

This statement indicates that evaluation was oriented toward improvement. The principal provided space for teachers to share experiences and obstacles, making evaluation part of the learning process.

At SD Negeri 2 Palatiga, evaluation was more dialogic and flexible. It did not always wait for formal meetings. Teachers could directly communicate problems to the principal after an activity. One teacher explained:

"Sometimes evaluation does not always wait for an official meeting. After an activity, we can directly tell the principal what the obstacles were. Usually, it is discussed immediately so that the next activity can be better." (S2-G3)

This quotation shows that reflective evaluation can take place through everyday interactions. Organizational learning occurred not only in formal forums but also through informal dialogue about experience, problems, and solutions.

At SD Negeri Palatiga, evaluation was used to adjust programs to school conditions. The principal and teachers reviewed which parts of a program could be maintained, simplified, or changed. One teacher stated:

“After an activity is completed, we usually look again at what is still lacking. If something does not fit the school’s condition, we find a way so that the next implementation becomes easier while still achieving the goal.” (S3-G2)

This finding shows that evaluation helped the school learn from concrete experience. It enabled the school to formulate strategies that were more suitable for its resources and institutional conditions.

Supervision also became part of reflective evaluation. Teachers explained that principal supervision was not only used to identify weaknesses but also to provide feedback and guidance. One teacher stated:

“During supervision, the principal usually gives notes and suggestions. It is not only about finding weaknesses, but also about giving direction so that learning and school activities can be better.” (S1-G3)

This quotation indicates that supervision contributed to organizational learning when it was carried out supportively. The principal acted not only as a controller but also as a mentor who helped teachers improve their work practices.

Across the three schools, reflective evaluation appeared in different forms. SD Negeri 2 Baubau emphasized structured evaluation, SD Negeri 2 Palatiga emphasized dialogic and flexible evaluation, and SD Negeri Palatiga emphasized contextual evaluation based on school limitations. Despite these differences, all three schools showed that evaluation was an important mechanism for adaptation, learning, and continuous improvement.

Overall, the findings show that adaptive educational management culture in elementary schools is developed through interconnected leadership practices. Principal leadership provides direction, participatory communication enables coordination, teacher involvement strengthens collective responsibility, program flexibility supports contextual adjustment, and reflective evaluation creates organizational learning. These mechanisms demonstrate that adaptive management culture is not merely the result of formal procedures, but the outcome of daily practices, social relations, and shared learning within the school organization.

DISCUSSION

Principal Leadership as a Cultural Practice

The findings of this study indicate that principal leadership plays a central role in developing an adaptive educational management culture in elementary schools. However, the role of the principal should not be understood merely as an administrative function related to planning, organizing, directing, and evaluating school programs. Rather, principal leadership operates as a contextual cultural practice that shapes values, work habits, communication patterns, decision-making processes, and collective responses to change. This finding strengthens the argument of [Leithwood et al., \(2020\)](#) who explain that school leadership contributes to educational quality through setting direction, developing people, and redesigning organizations. It also aligns with [Daniëls et al., \(2019\)](#) who emphasize that contemporary educational leadership involves building collaboration, trust, organizational learning, and innovation.

The contribution of this study lies in showing that the construction of adaptive management culture does not occur through a single leadership model. In SD Negeri 2 Baubau, adaptive culture emerged through structured management and clear coordination. In SD Negeri 2 Palatiga, it was shaped through collaborative communication and relational closeness. In SD Negeri Palatiga, it developed through contextual flexibility in dealing with limited resources. These variations demonstrate that adaptive leadership is not a fixed set of universal behaviors, but a situated practice shaped by institutional context, available resources, teacher readiness, and school culture.

This finding extends previous studies that often examine principal leadership as a variable influencing teacher performance, school effectiveness, or learning outcomes. While such studies are important, they tend to explain leadership through measurable effects rather than through the cultural processes by which leadership is enacted in daily school life. This study shows that principal leadership becomes adaptive when it is able to transform formal authority into shared meaning, collective responsibility, and context-sensitive managerial practices. Therefore, the principal is not only a decision-maker but also a cultural mediator who connects policy demands, school vision, teacher participation, and organizational learning.

From Vision Translating to Collective Work Culture

One of the important findings of this study is that school vision becomes meaningful only when it is translated into daily managerial practices. The school vision does not automatically shape adaptive culture if it remains a formal document. It becomes an organizational force when principals communicate it, connect it with programs, distribute responsibilities, and embed it in routines such as meetings, supervision, coordination, and evaluation. This finding

supports Kools & Stoll, (2016) view that schools as learning organizations are characterized by shared vision, collective learning, professional collaboration, and continuous reflection.

These findings align with Atasoy (2020), who found a relationship between principal leadership style, school culture, and organizational change capacity. In that study, school culture acted as a mediator between principal leadership and the school's ability to manage change. This means that principal leadership does not directly produce change without a supportive school culture. This study confirms this finding, as principals in three schools not only directed the program but also established work patterns that enabled teachers to understand the goals and feel part of the change process.

Theoretically, this study confirms that vision translation is a bridge between leadership intention and organizational culture. A principal may have a clear vision, but adaptive culture emerges only when teachers and educational staff understand the meaning of the vision and see its relevance to their work. In this sense, vision is not simply a symbolic statement; it is a cultural instrument that orients school members toward common goals. The findings also show that the translation of vision differs across schools. In more structured contexts, vision is translated through formal planning and task allocation. In more collaborative contexts, it is translated through dialogue and shared problem-solving. In resource-limited contexts, it is translated through practical adjustments and realistic program implementation.

This finding contributes to educational leadership theory by emphasizing that adaptive management culture is built through the interaction between direction and participation. Direction without participation may produce compliance but not adaptive culture. Conversely, participation without clear direction may lead to fragmented practices. Adaptive educational management culture requires both: clear leadership direction and collective interpretation among school members. This synthesis is important because it shows that the principal's role is not to impose vision, but to make vision collectively understandable, operational, and responsive to school realities.

Participatory Communication and Distibuted Responsibility

The findings reveal that participatory communication is a key mechanism in developing adaptive management culture. Communication in the three schools functioned not only as a means of delivering information but also as a space for coordination, negotiation, problem-solving, and collective meaning-making. Formal meetings helped schools maintain order and clarity, while informal conversations and digital communication enabled faster responses to technical problems. This finding resonates with Harris & Jones, (2020), who argue that school leadership in times of disruption cannot rely solely on a single leader but must be supported by collaboration, communication, and collective responsibility. The importance of teacher involvement in this study is consistent with distributed leadership perspectives, which view school improvement as a collective process involving principals, teachers, and other school actors. Galdames-Calderón (2023) shows that principals can promote teachers' professional development through distributed leadership practices, while Nadeem (2024) emphasizes that distributed leadership functions as a catalyst for school improvement by expanding responsibility and participation across the school community.

The study also supports the concept of distributed leadership as discussed Mifsud, (2024). Teacher involvement in decision-making, program implementation, and evaluation indicates that leadership functions were not confined to the principal. Although the principal remained the main actor in directing school management, adaptive culture emerged when teachers and educational staff were included as active contributors. This suggests that adaptive management culture requires distributed responsibility, where school members share roles in identifying problems, implementing programs, and evaluating improvements.

However, this study also reveals an important limitation in participatory practices. In some situations, communication remained principal-centered, and some teachers still waited for instructions before taking initiative. This finding shows that participatory culture cannot be assumed to exist simply because schools hold meetings or invite teacher input. Participation must be cultivated through repeated practices, trust-building, and capacity development. In this sense, the principal's task is not only to open communication spaces but also to strengthen teachers' confidence, initiative, and professional agency.

The novelty of this finding lies in showing that participatory communication is not merely a managerial technique but a cultural mechanism. It shapes how school members perceive their roles, how decisions are made, and how problems are collectively addressed. When communication is open and dialogic, teachers are more likely to feel ownership of school programs. When communication is closed and hierarchical, adaptation tends to depend heavily on the principal. Thus, participatory communication becomes one of the foundations of adaptive educational management culture.

Contextual Flexibility as the Core of Adaptive Management

The findings demonstrate that flexibility is a central characteristic of adaptive educational management culture. Flexibility appeared in different forms: adjusting schedules, redistributing tasks, using digital communication, simplifying programs, and adapting activities to available resources. This finding is consistent with the idea of adaptive leadership, which emphasizes the leader's ability to read challenges, engage members, and formulate context-sensitive responses. Adaptive leadership is particularly important in schools because educational institutions often face policy changes, limited resources, administrative pressure, and diverse learning needs.

This study contributes to the literature by showing that contextual flexibility is not the opposite of structured management. In SD Negeri 2 Baubau, flexibility occurred within a relatively structured management system. This means that schools can remain orderly while still being adaptive. In SD Negeri 2 Palatiga, flexibility appeared through quick coordination and communication. In SD Negeri Palatiga, flexibility was closely related to resource limitations and practical problem-solving. These findings indicate that adaptive management is not identical to spontaneous or informal practices. Instead, it refers to the school's ability to adjust strategies without losing institutional direction.

These findings broaden the understanding of adaptive leadership. Studies on the adaptive leadership of principals in the context of digital transformation indicate that principals play a crucial role in helping teachers adapt to technological changes and new educational demands (Oktaviani et al., 2025; Purwanto et al., 2025). However, this research demonstrates that adaptation is not solely related to digitalization. In schools with limited resources, adaptation is evident through the ability of principals and teachers to creatively manage limitations: adjusting tasks, dividing roles, and continuing programs with available resources.

The findings on program flexibility demonstrate that school adaptation does not always come in the form of major innovations or complex structural changes. In the context of the three elementary schools studied, innovation emerged more through schedule adjustments, realistic task allocation, the use of informal communication, and the utilization of available resources. This aligns with Chatzipanagiotou & Katsarou (2023), who emphasized that school leadership during times of change requires a rapid response, coordination, organizational resilience, and the ability to read the context. Therefore, contextual innovation in this study can be understood as a school's ability to generate practical solutions that are appropriate to institutional conditions, rather than simply introducing new programs.

The findings also challenge the assumption that innovation in school management must always involve large-scale programs or advanced technology. In this study, innovation often appeared in simple but meaningful practices, such as using communication groups to coordinate activities, redistributing administrative tasks, adjusting program implementation, and supporting teachers through practical collaboration. The findings also support the view that adaptive leadership becomes essential when schools face uncertainty, change, and institutional constraints. Netolicky, (2020) argues that school leaders must navigate tensions during disruptive situations, while Chughtai et al., (2023) demonstrate that adaptive leadership strengthens organizational innovation when supported by learning organization practices and change self-efficacy. These forms of innovation are contextual because they emerge from the real needs and constraints of the school. Therefore, adaptive educational management culture should be understood not only as the ability to create new programs, but also as the ability to make existing programs more relevant, realistic, and sustainable.

Practically, this finding suggests that school improvement policies should not impose uniform management models on all schools. Schools differ in terms of resources, teacher capacity, organizational culture, and community context. Therefore, principals need space to interpret policies and adapt programs to local conditions. Adaptive management requires policy flexibility, professional trust, and school-level decision-making capacity. Without these conditions, schools may respond to change only administratively rather than culturally.

Reflective Evaluation and Organizational Learning

Reflective evaluation emerged as a crucial mechanism for sustaining adaptive management culture. Evaluation in the three schools was not limited to checking program completion or administrative compliance. It also served as a space for identifying obstacles, discussing experiences, improving strategies, and learning from practice. This finding supports the concept of schools as learning organizations, in which reflection and collective learning are essential for continuous improvement (Kools et al., 2020; Kools & Stoll, 2016). These findings align with Schildkamp's emphasis on the importance of data-based decision-making in school improvement. According to the study, data can be used to set learning goals, monitor student progress, provide feedback, and support policy development and teacher professional planning (Schildkamp, 2019). In this study, reflective evaluation was already underway as a practice for discussion and program improvement, but had not yet fully developed into systematic, data-driven decision-making.

This is where this research's critical contribution lies. Reflective evaluations in three schools demonstrate the potential for organizational learning, but they still tend to be based on experiences, discussions, and program implementation records. These practices are important, but not sufficient, if schools are to build stronger adaptive management. Evaluation needs to evolve from verbal reflection to evidence-based reflection, for example through documentation of program outcomes, student attendance data, learning supervision data, teacher feedback, records of parent involvement, and student learning outcomes.

Kareem et al., (2024) found that learning organizations in schools are influenced by leadership style, personal commitment, and organizational culture; organizational culture even acts as an important mediator in the relationship between leadership and learning organizations. This finding aligns with Fullan (2020) argument that educational change requires coherence, collective capacity, professional relationships, and a collaborative culture. Therefore, a school's success in building an adaptive culture is not determined by the absence of obstacles, but by the ability of the principal and school community to transform obstacles into organizational learning spaces.

This research finding supports this notion because reflective evaluation only becomes meaningful when schools have a culture that is open to receiving feedback, acknowledging shortcomings, and collectively improving practices.

The important contribution of this study is that reflective evaluation is shown to operate in both formal and informal ways. In some schools, evaluation was conducted through structured meetings and document review. In others, evaluation occurred through direct conversations after activities. In resource-limited contexts, evaluation helped schools simplify programs and adjust implementation strategies. These variations demonstrate that organizational learning does not always require complex systems. It can emerge from everyday reflective practices when principals and teachers are willing to discuss what works, what does not work, and what needs to be improved.

Reflective evaluation also changes the meaning of supervision. In the findings, principal supervision was not only perceived as control but also as guidance. When supervision is conducted supportively, it can help teachers improve teaching practices, understand program weaknesses, and participate in school improvement. This suggests that supervision contributes to adaptive culture when it is dialogic, developmental, and improvement-oriented. Conversely, supervision that is merely administrative may strengthen compliance but not necessarily organizational learning.

This finding has theoretical implications for understanding the relationship between leadership and learning organization. Principal leadership supports organizational learning not only by creating formal evaluation systems but also by developing a reflective culture. A reflective culture allows school members to transform experience into knowledge and knowledge into improved practice. Therefore, reflective evaluation becomes a key link between daily management practices and long-term institutional adaptation.

A Conceptual Model of Adaptive Educational Management Culture

Based on the findings, this study proposes a conceptual understanding that adaptive educational management culture is formed through five interconnected mechanisms: vision translation, participatory communication, teacher involvement, context-based program flexibility, and reflective evaluation. These mechanisms are not separate stages that operate mechanically, but mutually reinforcing processes that shape school adaptability. Vision translation provides direction; participatory communication creates shared understanding; teacher involvement strengthens ownership; contextual flexibility enables realistic implementation; and reflective evaluation supports organizational learning.

This model offers a contribution to the study of educational leadership by positioning principal leadership as a cultural and relational practice. The principal does not construct adaptive culture alone. Rather, adaptive culture is co-produced through interactions among principals, teachers, educational staff, school programs, institutional constraints, and reflective practices. This perspective expands the discussion of principal leadership beyond administrative effectiveness and performance outcomes toward the cultural process of school adaptation.

The model also has practical implications. For principals, it suggests the importance of strengthening communication forums, involving teachers in decision-making, adjusting programs to school realities, and using evaluation as a learning space. For teachers, it highlights the need to move from passive implementation toward active participation in school governance. For supervisors and policymakers, it implies that school management improvement should not focus only on compliance indicators but also on the development of collaborative, reflective, and context-sensitive management culture.

Overall, the discussion shows that adaptive educational management culture in elementary schools is not produced by formal structures alone. It is developed through leadership practices that translate vision, open communication, distribute responsibility, adjust programs, and promote reflective learning. The main novelty of this study lies in its explanation of how principal leadership becomes a cultural mechanism for developing adaptive

management culture in different elementary school contexts. This finding strengthens the argument that school adaptation is not merely a technical response to change, but a social, cultural, and organizational learning process.

CONCLUSION

This study concludes that adaptive educational management culture in elementary schools is developed through principal leadership that functions not only as an administrative role but also as a cultural and relational practice. Across the three schools, principals contributed to adaptive management culture by translating school vision into daily work practices, strengthening participatory communication, involving teachers in decision-making and program implementation, adjusting programs to institutional contexts, and using reflective evaluation as a space for organizational learning. These five mechanisms demonstrate that school adaptability is not formed through formal structures alone, but through repeated leadership practices, social interaction, shared responsibility, and collective learning within the school organization.

The findings also show that adaptive management culture takes different forms depending on each school's context. SD Negeri 2 Baubau emphasized structured coordination and clear task distribution; SD Negeri 2 Palatiga relied more on collaborative communication and internal participation; while SD Negeri Palatiga demonstrated adaptability through flexibility in dealing with limited resources. This variation indicates that adaptive school management cannot be understood as a uniform model. It must be interpreted as a context-sensitive process shaped by leadership capacity, teacher participation, resource availability, and organizational culture.

Theoretically, this study contributes to educational leadership studies by positioning principal leadership as a mechanism for developing adaptive management culture rather than merely as a determinant of teacher performance or school effectiveness. Practically, the findings suggest that principals need to strengthen collaborative governance, reflective supervision, teacher participation, and flexible decision-making in order to build schools that are more responsive to change. For supervisors and policymakers, the study highlights the importance of supporting school-level autonomy and leadership capacity so that elementary schools can adapt policies and programs to their actual institutional conditions.

This study is limited to three elementary schools and uses a qualitative case study design; therefore, the findings are not intended for statistical generalization. Future research may involve broader school contexts, use mixed-method designs, or examine the relationship between principal leadership, adaptive management culture, teacher professional capacity, and learning quality. Such studies may further develop a more comprehensive model of adaptive educational management culture in elementary education.

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RT developed the research design, supervised the data analysis, and wrote the main manuscript. IJI, MU, MY WR, and HA contributed to data collection, field data processing, validation of findings, and final editing of the manuscript.

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The author used OpenAI ChatGPT during the preparation of this work for language refinement, structural adjustments to the journal template, and academic editing. After using the tool, the author thoroughly reviewed and edited the content as necessary and took full responsibility for the content of the publication.

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