

Exploring School Leaders' Experiences in the Implementation of Alternative Delivery Modalities During Calamities

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ABSTRACT

The purpose of this study was to explore the experiences of school leaders in the implementation of alternative delivery modalities during calamities. Employing a qualitative research design and a phenomenological approach, the study investigated the lived experiences of ten public school leaders in Davao de Oro, Philippines, who navigated responsive leadership amidst calamities. Through in-depth interviews (IDIs), the research captured the narratives of these leaders, emphasizing their adaptability, decision-making skills, support for teachers, and efforts to enhance communication and collaboration. The result of the study highlighted that adaptive leadership was crucial for remaining flexible, responsive, and open to learning new approaches. This adaptability was essential for supporting teachers and students and ensuring the continuity of education through the integration of new technologies. In the school setting, resilience and problem-solving were needed to solve uncertainties. Adaptive leaders who confronted problems, ambiguity, and complexity with confidence fostered supportive environments and utilized adversities to develop essential leadership skills. In addition, engagement with local government units and barangay officials in developing child-focused projects further enhanced learning environments and community involvement. Teachers were also encouraged to explore innovative teaching approaches, leveraging online platforms and digital resources. Enhancing collaboration with community organizations would leverage resources and expertise and enrich student experiences.

Keywords: Educational Leadership, Alternative Learning Modalities, School Heads, Qualitative-Phenomenological Inquiry, Purposive Sampling, Thematic Analysis, Region XI, Philippines

INTRODUCTION

The primary challenge for school leaders in implementing alternative modalities during calamities such as typhoons and earthquakes is the abrupt shift from traditional learning to alternative modalities. The sudden disruption caused by these calamities necessitates quick decision-making and adaptation to ensure the continuity of the teaching-learning process. The physical damage to school infrastructure further complicates matters, making creating a conducive environment for remote or alternative learning challenging. Additionally, ensuring equal education for all learners becomes a pressing concern, especially when faced with issues like power outages, internet connectivity issues, or students' varying levels of technological access. The school leaders must navigate these multifaceted challenges to effectively

implement adaptive leadership strategies and provide uninterrupted learning experiences for their students during unpredictable crises.

In 2022, massive floods severely impacted Pakistan, affecting a third of the country and damaging nearly 26,000 schools. This posed a significant challenge for the most vulnerable populations, putting them at risk of increased poverty and educational setbacks. School leaders face the crucial task of rebuilding schools and developing effective plans to support struggling learners (Selwyn, 2021). In Myanmar, the educational system has faced armed conflict and instability for the past seven decades. The said problem requires alternative learning methods for learning continuity. School leaders play a crucial role in implementing these modalities, working to provide accessible and adaptive learning opportunities amid persistent challenges (Lopes & Maber, 2019).

In the Philippines, the sudden transition from face-to-face teaching to alternative learning methods during disasters presents a significant challenge for school leaders. The lack of prior preparation exacerbates the difficulties faced by teachers as they navigate unfamiliar digital platforms and adjust their teaching strategies. School leaders are responsible for supporting their staff through this steep learning curve while also addressing the broader logistical and emotional impacts of the disaster on the school community. The time-consuming task of developing instructional modules further burdens teachers, leaving school leaders to manage the delicate balance between the urgent need for effective remote education and the well-being of their faculty, both personally and professionally (Alban & Alieto, 2022).

In Pandacan, Manila Philippines, school leaders face significant challenges in addressing deficiencies in educational systems during calamities such as limited access to computers and internet bandwidth for online learning, and the absence of conducive learning environments for teachers and students. School leaders encounter these obstacles in supporting student development, managing internet access limitations, and dealing with issues related to parental involvement and socioeconomic status during the sudden shift to remote learning (Dellomos, 2023).

Moreover, the recent earthquake that struck the Davao de Oro division caught school leaders off guard, disrupting the usual functioning of schools and highlighting the urgent need for innovative teaching approaches. Apart from managing the immediate aftermath of the earthquake, school leaders face challenges in implementing alternative delivery modalities during such disasters. Firstly, there is an issue of infrastructure damage, which hampers the accessibility of online platforms or even the physical school premises, making it difficult to conduct lessons effectively. Secondly, ensuring the safety and well-being of students and staff becomes a top priority, requiring school leaders to devise contingency plans for evacuation procedures and psychological support. Additionally, the lack of internet connectivity in some areas contributes to the digital divide, leaving marginalized students at a disadvantage in accessing remote learning materials. Moreover, the emotional impact of the disaster on both teachers and students cannot be overlooked, as they face trauma and anxiety, further complicating the teaching and learning process. The study by Hebecci (2023) highlighted the significant impact of natural disasters on education systems, emphasizing the challenges faced by students, teachers, and school leaders due to the destruction of infrastructure and loss of resources. Similarly, Lassa et al. (2022) expanded on this, noting that disasters affect not only schools but also parents, settlements, and infrastructure, leading to disruptions in education. However, neither study explored the responses and adaptive measures taken by school leaders to address these challenges, creating a research gap in understanding how school leaders navigate crises. By focusing on this gap, my study aims to examine the experiences of school leaders during calamities and investigate their strategies for implementing alternative delivery modalities to ensure learning continuity.

In terms of social relevance, this research offers practical recommendations for managing future crises and enhancing resilience within educational institutions. By shedding light on the challenges faced by school leaders and the effectiveness of their adaptive strategies, the study can contribute to the development of crisis management protocols and educational policies. Concrete outcomes may include identifying best practices for alternative delivery modalities, creating training programs for disaster preparedness among school leaders, and establishing support networks for knowledge sharing among educational stakeholders. The dissemination plan for this study involves sharing results through academic conferences, peer-reviewed publications, and workshops for educators and policymakers. Additionally, targeted outreach efforts will be made to local communities and educational institutions affected by disasters to ensure accessibility and actionable insights at grassroots levels. Through engaging diverse stakeholders in the dissemination process, the study aims to foster dialogue and collaboration toward building more resilient educational systems in the face of disasters.

Purpose of the Study

The goal of this phenomenological study was to investigate and comprehend the experiences of school leaders in implementing alternative delivery modalities during disasters. In this study, I sought to understand school leaders' decisions and strategies in real-time crises in the Davao de Oro Division.

At this stage in my research, exploring the experiences of school leaders in implementing alternative delivery modalities during calamities generally referred to their ability to adjust leadership strategies amidst crises, demonstrating resilience in challenging situations. Calamities encompassed different crises like natural disasters, pandemics, or unforeseen events that disrupted traditional education delivery methods significantly. The study investigated how school leaders responded to these challenges, emphasizing their capacity to adapt leadership strategies effectively.

Research Questions

1. What are the lived experiences of the school leaders in implementing alternative delivery modalities amidst calamities?
2. How do the school leaders cope with the challenges they encountered in implementing alternative delivery modalities amidst calamities?
3. What are the insights of school leaders in the implementation of alternative delivery modalities amidst calamity that can be shared with others?

Theoretical Lens

This study is seen through the Adaptive Leadership Theory by Heifetz and Linsky (2002), which emphasizes the importance of leadership in addressing adaptive challenges that require innovative solutions. While originally developed for business contexts, this theory has been adapted for educational settings to guide school leaders in navigating complex problems during crises. This theory discusses the application of adaptive leadership in education, highlighting the need for leaders to mobilize individuals and organizations to confront challenges, encourage learning flexibility, and explore new solutions.

In the context of this study, Adaptive Leadership Theory was highly relevant for crisis management in educational institutions, particularly during natural disasters. This theory emphasizes the importance of mobilizing people to address tough challenges and thrive in volatile, uncertain, complex, and ambiguous situations. During crisis management, adaptive leaders play a crucial role in assessing technological

capabilities, teacher and student preparedness, and providing support through professional development opportunities and emotional assistance during crises. They did not offer ready-made solutions but facilitated collective problem-solving, experimentation, and adaptation.

Moreover, this study is also seen through the idea of the Situational Leadership Theory by Hersey and Blanchard (1988), which underscores the importance of leaders adapting their styles to meet the specific needs of different situations, especially in uncertain and challenging scenarios like disasters. This theory emphasizes the importance of leaders adapting their styles to meet the specific needs of different situations, especially in uncertain and challenging scenarios like disasters. This theory includes four leadership styles (direct, coach, support, delegate) that are adaptive to the employee's range of developmental behavior. Adaptive leadership, as seen in crisis management, involves mobilizing people to tackle tough problems and thrive by facilitating collective problem-solving, experimentation, and adaptation. It is particularly effective in volatile, uncertain, complex, and ambiguous situations where solutions are unclear or changing. Adaptive leadership in crisis management requires a dynamic and flexible approach, encouraging experimentation, learning from failures, engaging stakeholders with different perspectives, and fostering resilience and innovation to help individuals grow and develop their potential.

In the context of this study, school leaders effectively managed crises and facilitated reconstruction efforts by employing a directive style during chaotic moments, engaging in collaborative processes, and transitioning to a participatory style as recovery progressed. This approach allowed them to adapt their leadership style to the needs of their followers, ensuring that everyone was equipped to handle the challenges posed by the crisis. This theory was instrumental in crisis management because it recognized that there was no one-size-fits-all approach to leadership.

The Contingency Theory of Fiedler (1967) posits that a leader's success depends on how well their leadership style aligns with the requirements of a specific situation. This theory is valuable for assessing the suitability of a leader for a particular job by matching their leadership style with situational demands. The theory posits that a leader's success depends on how well their leadership style aligns with the requirements of a specific situation. In a natural disaster affecting a school community, school leaders can utilize Fiedler's theory to select an appropriate leadership style based on the crisis. Fiedler's theory is based on three situational characteristics: leader-member relations, task structure, and leader's position. School leaders can determine the most effective leadership style for the situation by assessing these factors. Research also supports the use of Fiedler's theory in leadership. A study by Mark and Erude (2023) found that the contingency model of leadership effectiveness, which includes Fiedler's theory, had a higher predictive validity than other leadership theories. Additionally, Nastiezaie and Musavinejad (2018) found that Fiedler's model significantly predicted leadership effectiveness.

In the context of this study, school leaders effectively utilized Fiedler's Contingency Theory to select an appropriate leadership style based on the crisis at hand. The theory posited that a leader's success depended on how well their leadership style aligned with the requirements of a specific situation. For example, a directive leadership style immediately after a disaster struck ensured clear instructions were given to guarantee safety and effective crisis management. This theory provided a structured approach for leaders to match their leadership style with the demands of the situation, enhancing their ability to navigate crises and lead their teams effectively through challenging circumstances.

Scope and Limitation of the Study

The study was limited to 10 school leaders assigned within the public schools in the Davao de Oro Division

This study investigated school leaders' experiences, coping strategies, and insights during alternative delivery modalities in times of disaster. It was carried out during the second semester of the academic year 2023-2024, specifically from March to July 2024.

Moreover, this study utilized in-depth face-to-face interviews. The research concentrated on how school leaders implemented alternative delivery modalities during disasters, exploring their adaptive leadership practices. This included understanding their motivating factors and coping mechanisms as they addressed educational challenges in the face of calamities.

In connection, limitations of the study include the limited generalizability of findings, as the study was conducted to 10 school leaders in the Davao de Oro Division. Additionally, the absence of triangulation limited the validity of the findings, as the study relied solely on in-depth face-to-face interviews. Other relevant factors that limited the study included potential bias in the selection of participants, recall bias in reporting experiences, and social desirability bias in reporting coping strategies and insights.

Importance of the Study

In conducting this study, the researcher ensured that the findings provided valuable insights into the coping mechanisms of school leaders with challenges during calamities while implementing alternative learning modalities. This was intended to benefit the following:

School leaders could gain an understanding of the experiences of their colleagues and coping mechanisms, which can provide them with valuable insights into adaptive leadership. This knowledge enables them to improve their organizations' preparedness and responsiveness when dealing with similar crises. By understanding how other school leaders have successfully navigated through disasters, school leaders can develop more effective strategies for managing crises and ensuring the safety of their students, staff, and community.

Moreover, **teachers and staff** could benefit from hearing about school leaders' experiences, which can provide inspiration and practical insights into dealing with disasters. The study provides a resource for developing a collaborative and supportive school environment, which leads to a more comprehensive disaster response. By sharing their experiences and strategies, school leaders can help teachers and staff feel more confident and prepared when faced with a disaster. This can lead to a more effective response and a safer learning environment.

Furthermore, **students** could recognize how strong leaders in emergencies contribute to a secure learning environment, allowing them to adapt to alternative methods of instruction with minimal interruption. This knowledge empowers students to actively participate in their safety and adaptability in the face of unforeseen disasters. By understanding the importance of adaptive leadership, students can develop a sense of agency and resilience, which can help them navigate through challenging situations and continue their education.

Parents may gain insight into how school leaders handle challenges during emergencies. Understanding adaptive strategies can reassure parents while providing continuity and support to students, resulting in a more resilient learning environment. By sharing their experiences and strategies, school leaders can help parents feel more confident and informed about the safety and well-being of their children. This can lead to a stronger partnership between parents and school leaders, benefiting the entire school community.

Community stakeholders could learn about the experiences of school leaders in disasters. This understanding can help them to develop collaborative efforts, encouraging the community to actively participate and support adaptive education strategies, ultimately leading to a more collaborative

implementation of alternative learning modalities. By sharing their experiences and strategies, school leaders can help to build a stronger and more resilient community, which can benefit the entire region. Finally, **future researchers** would have a solid framework for comparative analyses of adaptive leadership during disasters. This study contributed to the relevant insight into making a continuous education system and enhancing leadership practices, encouraging a consistent investigation of adaptive leadership in crises. By sharing their experiences and strategies, school leaders can help advance the education field and contribute to a more resilient and adaptive society.

REVIEW OF RELATED LITERATURE

Learning Continuity through Alternative Delivery Modalities during Calamities

In the context of Learning Continuity through Different Delivery Modalities During Disasters, it's critical to recognize that supply chain management (SCM) principles can be applied to deliver a smooth and sustainable educational system in the face of disruptions (Drozdebob et al., 2022). Moreover, network design incorporates alternative delivery modes such as virtual learning environments, remote teaching methods, and crisis response plans (Fazli-Khalaf et al., 2020).

Flexibility allows adaptive leaders to swiftly tackle challenges, implement creative solutions, and nurture a culture of ongoing improvement within their institutions. This adaptability is vital in an educational setting where teaching and learning are continuously evolving (Tursynova et al., 2023). Furthermore, embracing learning and new methods ensures that school leaders remain current with advancements in educational technology, pedagogy, and best practices (Barnová et al., 2022). Similarly, learning has recently shifted toward sustainable development goals, emphasizing academic outcomes, environmental aspects, and social well-being during disasters (Yavari and Zaker, 2020). Furthermore, the increased number of disasters and emergencies worldwide, such as pandemics, wars, and other existential challenges, highlights the importance of effective reactions and resilience (Sachs et al., 2022).

Similarly, education becomes a top priority, if not a lifeline, for those affected. Focus on teaching stability during natural disasters, conflicts, and epidemics, assisting them in navigating crises and mitigating long-term effects (Torani et al., 2019). Likewise, adaptive leadership is crucial for driving positive change, encouraging growth, and ensuring the success of educational initiatives. By staying responsive and open to new ideas, adaptive leaders can effectively navigate the complexities of modern education, thereby creating environments that foster student achievement and institutional excellence (Waale et al., 2023).

A study by Starrett et al. (2022) discovered that teachers who experiment with new instructional methods frequently face uncertainties, which can be effectively managed through collaboration within professional learning environments. Embracing uncertainty in teaching can also create new learning contexts that challenge outdated assumptions and foster the development of new knowledge. Additionally, Staples and Massey-Abernathy, (2023) also supported the idea that resilience enables school leaders to adapt and recover from setbacks, enhancing their ability to foresee disruptions and implement effective contingency plans, thereby supporting their mental well-being

However, in times of difficulty, adaptive leaders demonstrate resilience by accepting change and uncertainty, which helps build confidence and trust within their organizations (Seibel et al., 2023). In fact, amidst these same unprecedented challenges posed by various disasters, educators found themselves at the forefront of adapting to new modes of instruction (Allen et al., 2020). Moreover, the increased prevalence of natural disasters has forced schools, colleges, and universities worldwide to close their doors

(Ferri et al., 2020).

Similarly, calamities caused a crisis in the education sector, forcing communities and governments to make tough decisions about how to adapt in challenging moments (Flack et al., 2020). In relation, power structures had to quickly adopt alternative steps such as teleconferencing for classroom instruction, collaborative work between faculty, the utilization of learning management systems (LMS) for tracking academic performance, creation of online teaching repositories, development of multimedia content through applications and services, production of Reality shows for educational purposes, and participation in web-based conferences and webinars (Area & Adell, 2021).

Consequently, Baas et al. (2022) found that school leaders, through a community platform, accessed a centralized repository that allowed them to both contribute to and benefit from a wide range of educational resources. This repository could include input from various third parties, offering educators valuable materials to effectively implement alternative delivery modalities. Segkulu (2023) also revealed that school leaders are crucial in promoting collaboration and innovation to meet the changing needs in educational settings. They facilitate the use of community resources by ensuring secure and accessible visits, arranging transportation, providing incentives for community participation, and encouraging cooperation between teachers and Community Resource Centers.

Moreover, by actively managing communication and coordination among stakeholders, school leaders create an environment that effectively utilizes community resources to address the evolving educational needs of students (Tomajin, 2022). School leaders are crucial in improving student learning outcomes and overall school performance by adopting innovative teaching methods (Albino, 2023). During calamities or unforeseen disruptions, school leaders must exhibit flexibility and creativity in applying alternative delivery methods to maintain continuous learning (Hernandez et al., 2023).

Furthermore, the sudden shift in the educational landscape compelled institutions to reconsider their learning, teaching, and evaluation practices. The challenges posed by hazards such as floods, seismic activity, and typhoons prompted a reassessment of how educational services have been delivered at all levels. The unplanned and unplanned transition to online education became a daring educational technology experiment, employing various operating systems and technological resources to ensure learning connectivity (Sánchez Mendiola et al., 2020).

Subsequently, empowering teachers to innovate in their teaching methods is essential for improving educational outcomes (Soroño & Quirap, 2023). Additionally, school leaders play a crucial role in demonstrating adaptive behavior by embracing new ideas, taking calculated risks, and showing accountability (Anaktototy, 2023). By embodying these traits, leaders inspire confidence and resilience in teachers, fostering a culture that supports navigating challenges and embracing change within the educational setting (Francisco & Cabigan, 2023).

Consequently, Harahap et al. (2022) highlighted the significance of school leaders prioritizing continuous professional development (CPD) for teachers. CPD programs keep educators updated with the latest educational practices and trends, thereby enhancing their teaching effectiveness. Esmade (2023) supported the idea that by investing in ongoing training, school leaders empower teachers to continually improve their skills, leading to better student learning outcomes and overall enhanced school performance. In connection, Canatan et al. (2023) revealed that school leaders are crucial in creating communication plans that define the roles, responsibilities, and support systems for stakeholders within the school community. By establishing clear communication strategies, they ensure that parents, teachers, and other stakeholders fully understand their roles in contributing to the school's mission and goals.

Additionally, Wolfenden et al. (2022) highlight the significance of effective communication in building trust and transparency. Such communication fosters a supportive and cohesive environment where all members feel valued and well-informed. Liu et al. (2024) revealed that these plans should include regular updates, mechanisms for feedback, and opportunities for open dialogue to quickly address any concerns or issues that may emerge. Dederling and Pietsch (2023) also found that this approach enhances trust and collaboration among all stakeholders. Likewise, Yulianti et al. (2020) found that trust between school leaders and teachers is crucial for encouraging collective teacher innovation, which is essential for continuous school improvement. There is a connection between the trust that school leaders place in teachers and the teachers' collective innovativeness highlighting the role of trust in fostering a culture of innovation.

Challenges of School Leaders in the Implementation of Alternative Delivery Modalities during calamities

Natural disasters have become catalysts for global crises in our ever-changing world, prompting a reconsideration of traditional educational structures and an urgent need for alternative delivery modalities. Despite a wealth of literature on adaptive leadership, the steadfastness of established schooling arrangements in the Philippines remained largely unchanged until these calamities triggered an abrupt shift in the educational landscape (Zhao et al., 2022). Natural disasters have exposed deep-seated inequalities within and across the country, amplifying economic and social consequences and worsening the crises. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO), an estimated 90% of students in the Philippines were affected by school closures during such calamities, forcing communities to seek innovative ways to ensure the continuity of education (UNESCO, 2020).

Furthermore, school leaders in the Philippines should provide a road map for crisis response, emphasizing information gathering, adjustment, quick decision-making, illustrating concern, and clear communication. Decision-making is essential in the early stages of a crisis and transitioning to working groups when the situation stabilizes (Mutch, 2020). Furthermore, research involving faculty members from various regions reveals the challenges posed by stakeholders and the importance of technology in learning (Huber & Helm, 2020). During a crisis, imperative practices include signal detection, empathy, effective communication, collaboration skills, and advantages for continuous learning (Thornton, 2021).

Furthermore, the adaptable orientation to change emphasizes the delicate balance of responding to unexpected events while maintaining a clear sense of direction. This is particularly pertinent in disaster situations, emphasizing the importance of adaptive leadership. This suggests that school leaders must have a dynamic and responsive approach, integrating concrete action with empathy, effective communication, and a more significant commitment to learning and improvement (Gurr & Drysdale, 2020).

Similarly, when trying to implement alternative delivery modalities during disasters, school administrators face significant challenges that impact both academic achievement and students' social and emotional well-being. Evidence suggests that student performance may have been impacted, with losses lasting less than two months and minimizing over time (Maldonado & De Witte, 2021). However, conflicting research indicates that the predicted adverse effect may not be as severe as before (Harmey & Moss, 2021).

On the other hand, the obstacles of home learning and exposing technological access discrepancies are not restricted to the Philippines; they exist across borders. Students from increased families in Cambodia, Laos, and Vietnam have more engaging education opportunities about global issues. Nevertheless, interruption has stimulated innovation in these countries' education sectors, particularly in training educa-

tional professionals in digital pedagogies (Andrew et al., 2020).

As a result of the disruptions in Cambodia, Laos, and Vietnam, conversations between schools and homes have improved, fostering a sense of community and shared responsibility for students. This cooperation and communication is critical in addressing the immediate challenges of remote learning, stressing the importance of a seamless connection between the home and school environments and transcending geographic barriers (Bradbury et al., 2023).

Similarly, during disaster events in these Southeast Asian countries, effective school leadership is critical for vulnerable student populations, such as those with intellectual disabilities, who are especially vulnerable to crises. A motivated and responsive approach is required, especially given the potential illnesses associated with their impairment (Torrás Virgili, 2021). On the other hand, school leaders must demonstrate a clear vision, common goals, efficient communication, and involvement in staff well-being. Connecting these diverse insights to the increasing awareness of school leaders' shared challenges in implementing alternative delivery modalities during disasters creates a narrative that transcends borders (McLeod & Dulsky, 2021).

Consequently, comparing in-person instruction to distance learning raises critical questions for school administrators, especially during crises (Vasquez et al., 2023). In the Philippines, with even more than 56% of public schools providing in-person instruction, the government's decision to restart schools for face-to-face classes reflects the crisis response (Singh & Singh, 2021). Furthermore, building trust and collaboration among school leaders, teachers, and parents creates an environment that supports student learning and development. This collaborative effort not only improves student outcomes but also significantly contributes to overall school enhancement (Ang & Spencer, 2022).

In times of crisis, effective school leaders are essential in rallying and guiding staff, students, and the community toward a unified objective, thereby fostering unity and cooperation (Pastor et al., 2024). Dimitrovska et al. (2023) also found that addressing conflicts and disagreements swiftly is crucial for maintaining harmony and preventing issues from worsening during challenging times. Similarly, Virella (2023) further highlights the role of responsible leadership in managing crises, emphasizing the importance of building and sustaining relationships within and beyond the school.

Additionally, Alrawashdeh (2024) revealed that in managing crises, school leaders enhance their effectiveness by remaining composed and decisive, which not only boosts confidence among others but also promotes stability and informed decision-making. Sinlapapiromsuk et al. (2023) revealed that building credibility and trust with stakeholders is vital, and this can be achieved through transparent, accountable, and integrity-driven leadership practices. Smith et al. (2023) found that by embodying these qualities, leaders can forge strong relationships with stakeholders, fostering trust and confidence in their leadership, which is crucial for effective crisis management and overall organizational success.

During crises, school leaders exhibited significant adaptability by quickly revising their plans to address emerging challenges, irrespective of the situation (Striepe et al., 2023). The COVID-19 pandemic, for example, necessitated that leaders rapidly adjust their strategies to handle the unprecedented conditions. Chingara (2022) found that a major emphasis for these leaders was guiding teachers and staff in adapting their instructional methods for remote learning, highlighting their responsiveness to the evolving educational environment. Furthermore, the promotion of a culture of experimentation and adaptability within schools became essential, allowing educators to explore and adopt new teaching approaches while focusing on ongoing improvement and innovation in education.

Meanwhile, as schools resume after more than two years of lockdown, the challenges persist, necessitating a comprehensive study on the opportunities and limitations of reopening face-to-face classes (Mercê et al., 2023). School leaders in Cambodia, Laos, and Vietnam share similar concerns and are navigating comparable challenges in implementing alternative delivery modalities during calamities (Nworie, 2020). Furthermore, the role of school leaders becomes even more valuable as they are tasked with balancing the directives from higher DEPED authorities with the needs of their teachers and students (Medeiros et al., 2022). As a result, stress and fatigue are visible issues affecting school leaders (Pressly & Ha, 2022). The shift to face-to-face instruction requires supportive professional development techniques to equip school leaders with the necessary skills and alleviate stress (Permata et al., 2022).

However, Pakistan's local government has provided flood disaster guidelines to school children, carried out in stages and on a detailed schedule. Disaster mitigation education is socialized so that the younger generation understands what flooding is and what steps can be taken to reduce disaster risk (Angriani et al., 2018). Furthermore, floods are caused by three key factors: a threat, the susceptible state of the affected population, and the ability to cope with or mitigate the impact. Integrating such factors turns a single event into a disaster, exacerbating the challenges individuals and groups face in restoring and rebuilding (Halim et al., 2019).

Leadership Style and Crisis Management

Despite a lack of arrangement, similarities emerge across different approaches, particularly the recognition of leadership as an interpersonal interaction in which leaders exert influence over followers through interpersonal or transactional processes (Yan et al., 2021). Additionally, leadership is viewed as a positive role that helps to improve situations or environments and directs people toward desired outcomes. The contextual nature of leadership is emphasized, with leaders adapting their styles, characteristics, and skills to situations. In emergency management and recovery settings, leaders are essential in ensuring organizational success and achieving desirable results (Jensen & Kirkpatrick, 2022).

In a similar vein, Ziduli and Buka (2023) highlight the crucial role of school leaders in involving community leaders and stakeholders in evaluating the effectiveness of alternative delivery methods. This collaborative approach ensures that a wide range of perspectives and insights are considered, offering a thorough assessment of their impact on the school community. Reis-Andersson (2023) found that regular self-reflection and soliciting feedback from community leaders, teachers, and students are key practices for school leaders.

Moreover, in educational settings, the ability of school leaders to quickly adapt to challenges is vital for the success of alternative delivery methods. Educators must skillfully adjust their strategies in response to unexpected issues while maintaining a proactive stance in their educational planning (Abucay, 2023). During the COVID-19 pandemic, for instance, school leaders faced the significant challenge of adapting to sudden shifts, including transitions to remote, hybrid, and simultaneous teaching models. To address these challenges, leaders developed detailed plans to reorganize school operations and encouraged innovative teaching methods among educators to sustain learning continuity (Shaw, 2022). Similarly, during the earthquake, school leaders were instrumental in quickly implementing essential measures such as social distancing and health protocols (Williams & Liou, 2023).

Moreover, school leaders can enhance their decision-making effectiveness by incorporating input from stakeholders. Research indicates that engaging stakeholders in the decision-making process can yield better results and garner greater support for decisions (Shebli, 2023). Additionally, Wong et al. (2023)

highlight the importance of nurturing a culture of creativity and continuous improvement to foster innovation and decision-making skills among school leaders.

Furthermore, actively seeking feedback on decision-making is essential for school leaders to refine their practices. Gathering insights from diverse sources such as teachers, students, and parents provides valuable perspectives that can enhance decision-making processes (Anjum, 2022). Similarly, empowering staff members to make decisions within their areas of expertise by granting them autonomy and authority promotes a sense of ownership and responsibility, thereby strengthening the decision-making framework (Bercovici et al., 2023).

Additionally, Abdallah (2023) revealed that school leaders can significantly enhance teacher development by providing comprehensive training and support, which fosters a culture of continuous improvement and innovation within the school. Similarly, Boyle et al. (2021) found that when teachers and staff are empowered with adequate support and autonomy, their commitment to the school's goals and vision is strengthened. Teachers who feel trusted and supported by their leaders are more likely to be motivated and engaged in their roles.

Moreover, Kareem et al. (2023) found that granting teachers autonomy in areas such as teaching practices, curriculum development, and classroom management can lead to greater job satisfaction and a stronger sense of ownership over their work. This autonomy not only increases their dedication to the school but also enhances their overall commitment. In connection, Junger et al. (2023) highlighted that school leaders are essential in tackling challenges related to technology and resource accessibility in education. Additionally, Albadawi (2023) also found that school leaders are pivotal in driving change toward equity and inclusion by using their local insights to implement incremental actions that support marginalized students.

Furthermore, to address the digital divide, school leaders must actively advance digital transformation, incorporate information technology into educational practices, and innovate teaching models and methods to improve teaching effectiveness and quality (Anwar et al., 2022). Similarly, school leaders must collaborate with employees, volunteers, and community members (Alshayhan & Yusuf, 2021). It was also found that effective leadership in these contexts entails skillfully applying communication skills to achieve desired outcomes and instill hope, love, and positivity among members (Mahmud et al., 2020).

Unquestionably, examining positive affect within the realm of leadership style and crisis management among school leaders reveals its significant role, despite its extensive study in other contexts where it is generally perceived as beneficial in the workplace (Wang et al., 2021). In contrast, "affect" encompasses a broad spectrum of emotions, feelings, and moods (Clarkson et al., 2020). Likewise, positive affect is an overall good, positive, or pleasant mood or emotion, reflecting high energy, concentration, and environmental engagement (Shiota et al., 2021).

Moreover, leaders with a positive outlook are more likely to create a work environment filled with joy, excitement, contentment, amusement, calm, satisfaction, positivity, cheerfulness, happiness, attentiveness, interest, and alertness. These positive emotions create a conducive environment for crisis management, encouraging collaboration, resilience, and effective problem-solving among school leaders and their teams (Carleton et al., 2018). Conversely, negative affects, encompassing hostility, guilt, and irritability, can hinder the decision-making process and exacerbate challenges during crises. Therefore, school leaders must be attuned to their emotional states and cultivate positive affect to navigate crises successfully (Harmon-Jones & Harmon-Jones, 2021).

Consequently, emergency and recovery operations leaders navigate two intricately connected contexts through the routine, everyday setting and the intensified crisis environment. As an example, it is found that there is a positive effect of employees in emergency services, examining responses to pandemics such as COVID-19 in China and the positive effect of school leaders' performance in handling crises (Feng et al., 2022). However, leadership encouragement can affect communication, particularly in school contexts (Rosing et al., 2022).

Ultimately, despite these limited insights, it is clear that leaders' positive effects significantly impact the well-being of followers and the overall performance of organizations in emergency and recovery contexts. Leaders' complex and challenging role in this specific domain, addressing high levels of community sensitivity while managing growing requirements, provides a rich context for data analysis that has yet to be thoroughly explored (Brandebo, 2020). Similarly, a leader's behavioral patterns and meaningful interaction significantly impact emergency services teams. This positive effect, which includes optimism, openness, and optimism communicated by leading figures during crises, catalyzes shaping the overall dynamics of the team (Reyes et al., 2020).

Crisis Mitigation Measures of School Leaders

The educational leadership environment has long been dominated by organizational change, with little assimilation of school-level leadership and crisis management, particularly connecting school and system current leaders to transboundary global crises. Educational organizational change primarily concerns sudden-impact events such as workplace bullying and natural hazards (Mascio et al., 2020). However, fundamental calamities have shifted the paradigm from viewing crises as unexpected, individual events to recognizing prolonged growing crises with compound effects experienced in successive interlinked vibrations, primarily affecting the weak (Boin et al., 2020).

Furthermore, as schools reopen, the complexity of the injustices affected by the disasters requires a shift from an emergency response to a long-term and deliberate one. This re-conceptualization of crises adds new layers of complexity for school leaders, decision-makers, and policy analysts actively rethinking education (Biesta, 2020). As a result, school leaders face the challenge of navigating the immediate consequences of crises and their long-term and interconnected effects. Mitigating the multifaceted challenges posed by calamities requires a comprehensive and sustained approach beyond the traditional crisis management phases (Maitland, 2020).

Additionally, throughout the United Kingdom, much like in many other areas, the closure of nearly all school buildings creates waves of disruption, resulting in a sudden and enduring sense of "loss" and continuous adaptation processes among the school (Kim & Asbury, 2020). This included the loss of physical presence in the school community, ongoing interaction with students, colleagues, and parents, external validation from established accountability systems, disruptions to the assessment calendar, and internal validation through day-to-day present teamwork (Harris, 2020).

Simultaneously, teachers faced the challenges of maintaining their occupational identity amid the responsibilities of homeschooling and caregiving. The swift transition to online education compelled teachers to acquire proficiency in the pedagogical use of communication software such as Zoom and Microsoft Teams and online teaching and learning tools like SeeSaw and Google Classroom (Goudarzi et al., 2023).

Furthermore, during school closure, school leaders maintained their commitment to educational equity and the well-being of teachers and pupils, focusing on safeguarding them (Ahtiainen et al., 2022). To

mitigate the impact on well-being and education, effective collaboration among public sector professionals became both a normative and operational imperative. Professional collaboration in multi-agency partnerships has become increasingly prevalent in publicly funded schools in the UK (Driscoll et al., 2020).

Similarly, close working relationships between education, health, and social work have been promoted to address persistent challenges related to poverty-related educational inequities (Klein et al., 2021). On the contrary, the impact of social disadvantage on well-being was prominently addressed within legislative and policy contexts across the UK. Interagency collaboration was evident in person-centered, place-based initiatives, such as the "nurturing city" in Glasgow, Scotland (Chapman, 2019).

Moreover, schools have increasingly become hubs for co-located services to families and communities, including food banks, guidance, and counseling services. The closure of UK schools during the pandemic is estimated to potentially reverse a decade of progress in closing a persistent poverty-related attainment gap, posing additional challenges for future social mobility in post-Brexit Britain (Cullinane & Montacute, 2020). As the landscape of educational leadership evolves into networked leadership, school leaders find themselves in dual roles—acting as organizational leaders while actively participating in a complex web of inter-school and multi-agency (Greany, 2023).

Also, Paton (2021) emphasizes the critical role of administration in maintaining the overall health of an organization, serving as the driving force behind its effectiveness and efficiency. Administrative leadership plays a pivotal role in guiding individuals toward a common objective. This includes the principal's administrative duty, which is crucial for the organization's survival and growth (Alhassani, 2022).

Consequently, the school leaders, often seen as the regulator of the organization's tone and environment, act as a unifying force that allows various components to function as a cohesive system. The combination of authority and leadership in school leaders enhances the overall performance of the system. Effective administrative leadership is indicative of an organization's success, reflecting improved coordination and control. The principal's responsibility is not only to address the immediate needs of the organization but also to align them with broader objectives and goals (Sasan, 2021).

In the same way, understanding the complexity and breadth of their functions and duties is imperative for school leaders, who also play a significant supervisory role. Supervision (Tintoré et al., 2022). In addition, a supervisory leader, characterized as transformational, inspires, encourages, serves as a role model, and maintains strong connections with teachers, students, and the community. As part of these supervisory responsibilities, the school leaders ensure that students achieve the required learning outcomes, preparing them for various paths, including college, employment, entrepreneurship, and middle-level skills (Lawrence et al., 2020).

Meanwhile, the two inseparable responsibilities of school leaders are administration and supervision. Success in management plans is intricately linked to the capacity to embrace and adapt to changes in environmental settings and individual behavior. The success of school leaders depends on their adeptness in navigating change, seamlessly blending administrative work with supervisory abilities to steer the institution toward continuous improvement and success (Phongphanit, 2019).

The Role of School Leaders and Disaster Preparedness and Response

The Daniel Alcides Carrión school in Mala Vida, Peru, exemplifies resilience and innovation in disaster preparedness and response. The school's digital curriculum on cyclical rains during an El Niño event demonstrates adaptability and emphasizes the importance of school leaders in disaster management (Vigil

& Booker, 2023). In connection, school leaders played a pivotal role in steering the initiative, turning adversity into an opportunity for education and community empowerment. The interdisciplinary, cross-sectoral collaboration addressed the challenges posed by the pandemic and shed light on the often-overlooked positive aspects of the El Niño phenomenon in the Sechura desert (Caño et al., 2023). Furthermore, this same multimedia curriculum earned national exposure and a local education innovation prize. This success highlights the effectiveness of visionary leadership in disaster resilience planning (Cajachagua-Torres, 2022). Moreover, school leadership is essential in promoting and implementing resilience paradigms. The emphasis has shifted away from the traditional connectivity approaches and toward enabling vulnerable communities (Block et al., 2023). Similarly, school leaders must be flexible when launching ground-up initiatives that consider disaster scenarios. Resilience is commonly characterized as a machine's ability to absorb disruptions, recover, and return to normalcy. It has evolved into a process-oriented concept instead of simply being the opposite of weakness (Manyena et al., 2019). Furthermore, in the context of the Philippines, a country highly susceptible to disasters due to its location within the Pacific Ring of Fire, the impact on lives and properties is substantial (Santos, 2021). Likewise, recognizing the urgency of addressing the high risks, taking severe actions, and adopting DRRM. Schools play a pivotal role in ensuring constituents' safety during catastrophic events. While traditionally associated with preschool year preparations, it has evolved into a year-round essential component of the School Improvement Plan (SIP) (Cresencio & Yabut, 2023). In connection, school leaders play an essential role in disaster preparedness and response by instilling a culture of compliance and resilience in teachers, making sure that DRRM is seamlessly applied to the school's system (Atkinson & Fowler, 2023). The literature review highlighted the challenges school leaders face in implementing alternative delivery modalities during disasters, emphasizing the significance of leadership behavior in stabilizing education and ensuring learning continuity. The discussion covers leadership style, crisis communications, mitigation strategies, and school leaders' roles in response and recovery. The need arises from the identified challenges faced by school leaders during crises, highlighting the critical role of adaptive leadership in navigating through uncertainties and ensuring effective educational practices during disasters. By conducting this study, a deeper understanding of how school leaders adapt and implement alternative delivery modalities can be gained, addressing the gaps in current knowledge and providing insights into enhancing leadership practices for educational continuity during crises.

METHODOLOGY

Research Design

This study employed qualitative research and a phenomenological approach to elicit additional insights from the lived experiences of school leaders in adaptive leadership when instituting alternative learning during disasters. A qualitative approach values the stories of people and encourages them to express themselves. It included the various perspectives from which phenomena could be perceived while acknowledging the diverse viewpoints and interpretations people brought to the team. This multifaceted exploration broadened our awareness by acknowledging the complexity inherent in the studied phenomena (Ugwu, 2023).

In my study, I used a qualitative research design and a phenomenological approach to investigate the life experiences of school leaders navigating responsive leadership during disasters, particularly when implementing alternative delivery modalities. This approach consistently respected and described the lived experiences of leaders, allowing them to authenticate their narratives. Using a qualitative lens, my study

acknowledged the uniqueness of these stories and the diverse perspectives that individuals brought to the complex landscape of adaptive leadership during crises. I aimed to reveal the different viewpoints of school leaders and interpretations, allowing me to understand the challenges and strategies involved in implementing alternative learning modalities during calamities.

Moreover, information was typically gathered through in-depth interviews (IDIs), in which thoughtful and pointed questions were used to explore an individual's perspectives rather than imposing predefined categories through predetermined questionnaire selections. This method meticulously investigated participants' viewpoints (Delve & Limpaecher, 2021). As a result, this study collected qualitative data through in-depth interviews (IDIs). The in-depth interview process (IDI) was a qualitative approach that engaged participants in lengthy, open-ended conversations to explore their perspectives, observations, and keen insights into a specific phenomenon (Roberts, 2023). Furthermore, this research used phenomenological investigation, a qualitative research method concentrating on the essence of lives and experiences (Qutoshi, 2023). Phenomenology, widely used across disciplines, seeks to understand participants' outlooks on culture, historical events, identity, and way of life. The phenomenological approach involves an inquiry focused on individuals' lived experiences through interviews to extract personal testimonies, oral histories, written oral histories, and biographies (Muzari et al., 2022).

In the context of this study, I considered taking a phenomenological approach, focusing on the essence of lives and experiences among school leaders engaged in adaptive leadership during disasters, specifically the implementation of alternative delivery modalities. My study examined the experiences of participants to understand how cultural differences, historical contexts, and individual identities shaped their responses to crises. Using phenomenology, I aimed to comprehensively understand how school leaders dealt with these difficulties by conducting in-depth interviews to capture their notions, oral histories, and written reflections. This approach enabled the study of adaptive leadership strategies in crisis settings by focusing on respondents' unique ideas and perspectives.

Research Participants

This study included ten (10) current public-school leaders assigned to Davao de Oro. The researcher conducted in-depth interviews (IDIs) with each. Rutledge and Hogg (2020) recommend a limited number of individuals for qualitative research, usually ranging from five to twenty-five, which is relevant for the study's size. Participants in this qualitative research were identified using a purposive sampling method. This method selected information-rich cases and effectively utilized available resources. It involved identifying and selecting individuals or groups who were skilled and knowledgeable about the area of interest (Campbell et al., 2020).

Dekkers et al. (2022) proposed that participants meet inclusion criteria to ensure the study's consistency, reliability, uniformity, and objectivity. Participants in this study must meet the following criteria: a.) must be an elementary public-school leader assigned to the Department of Education, Davao de Oro division; b.) have personally experienced calamities; and c.) have two years or more working experience as a school leader. The exclusion criteria for participant selection may include individuals who do not meet the specified criteria for being an elementary public-school leader in the designated division, those who lack personal experience with calamities, and individuals with less than two years of working experience as a school leader. Furthermore, participants who do not consent to participate in the study or exhibit any conflicts of interest that may impact the research outcomes could also be excluded.

Role of the Researcher

Bhandari (2022) identified crucial roles of researchers in their collective contribution to the integrity of

the study, such as being interviewers for In-Depth Interviews (IDI), capturing and recording data, transcribing information, ensuring accuracy through verification, and, ultimately, taking on the primary responsibility of data analysis. These roles are outlined in my study as follows:

As the interviewer, I created and prepared the interview guide, which was then reviewed and approved by experts. I coordinated the process of conversation by asking questions where the responses of the participants were considered important information in conducting the study. I conducted the interviews in various schools in Davao de Oro Division.

As someone who ensures that the entire interview is properly recorded, I made sure all interviews were recorded using the device's recording feature. Afterward, I transcribed the interviews according to the required qualitative research format. I also verified the accuracy of the transcripts by letting participants review them through the process of member checking.

As the transcriber, I carefully recorded every detail from the in-depth interviews using the prescribed qualitative research transcription format, which was essential for detailed analysis and study. Additionally, I was responsible for ensuring that the transcripts accurately reflected the participants' accounts. To achieve this, I provided participants with the opportunity to review their transcripts through a process known as member checking, confirming that their responses were represented correctly.

In my role as the translator, I converted the participants' responses into Standard English. Before the interviews, I informed the participants that they could speak in their preferred language or dialect for their comfort. Following the interviews, I translated their verbatim responses into English to prepare the data for a clear presentation of the results.

Finally, as the primary data analyst, I was responsible for analyzing all the information collected from the interviews once it was transcribed and translated. Moreover, I sought assistance from my data analyst to examine my formulated analysis.

Data Sources

Data is the evidence gathered by a researcher to understand the question or objectives of the study, and the type of data collected varies depending on the nature of the research study. According to Creswell (2012), data collection includes observation reports, interviews, transcripts, audiovisual records, and physical artifacts. In qualitative research, the researcher can employ diverse data sources.

In my study, the primary data was derived from in-depth interviews, a cornerstone in qualitative research recognized for providing profound insights into the experiences, emotions, and interpretations of individuals in the social world. As a researcher, I embraced the concept of deeper description, in which interviews focused on capturing rich details and emotional experiences that highlighted the lived experiences, events, or situations under investigation (Nii Laryeafio & Ogbewe, 2023).

I supplemented the primary interview data with secondary sources such as journals, articles, books, and audiovisual recordings from various authors and researchers in this study. This multi-source approach deepened and enriched the study by including a variety of perspectives and supporting information. This method provided a well-rounded and comprehensive understanding of the subject.

Data Collection Procedures

Qualitative data collection methods were critical for gathering textual data on the different aspects of a specific issue or program. These dimensions of the research study included seeking permission from authorities, involving the use of Informed Consent Forms (ICF), conducting orientation sessions, preparing an interview guide, executing In-Depth Interviews (IDI), and establishing literature on qualitative research that emphasized the importance of ethical considerations, consent, and thoughtful

preparation for gathering insightful data (Bhat, 2022). The dimensions of the data collection process were described in this study as follows:

First, obtaining permission from the appropriate authorities was critical to ensuring ethical clearance and institutional support for the study. This was the initial step toward securing approval letters from the Research Ethics Committee (REC) and the Dean of the Graduate School. Following the submission of the study-related documents, the next step was to send a communication letter to the division superintendent of the Davao de Oro Division requesting permission to conduct the study. Subsequently, approvals from the District Supervisors of the identified school heads within their respective schools were requested.

Second, Informed Consent Forms (ICF) were incorporated. On the interview day, participants were given an Informed Consent Form to ensure and justify their willingness to participate in the study. They were informed that they could respond in their dialect and retain the right to refuse any questions they found uncomfortable during the interview. Before the start of the interview, permission was sought to record their responses and individual interviews with participants and informants were conducted at their preferred times.

Third, orientation sessions were conducted by messaging the participants through email, messenger, and online means to introduce myself and orient them about the purpose of the study, seek permission to conduct the research and establish a suitable schedule for conducting virtual in-depth interviews. These sessions emphasized the voluntary nature of participation which allowed participants to ask questions and ensured a shared understanding of the research process.

Fourth, an interview guide was created by structuring in-depth interviews (IDI). This guide included well-thought-out questions relevant to the research objectives, allowing participants to explore their own experiences and perspectives. It served as a tool for maintaining focus during data collection, ensuring that relevant and insightful information was obtained. I also engaged participants in thoughtful conversations to better understand their experiences. This method-built rapport and enhanced active listening skills, making it easier for participants to share their insights.

Lastly, literature for qualitative research was established by thoroughly reviewing existing literature on qualitative research methodologies. In this study, I also investigated scholarly articles, books, and other relevant publications that discussed ethical considerations, consent procedures, and the importance of thorough preparation in qualitative studies. I paid special attention to studies that fit the nature and scope of my research.

Data Analysis

The data analysis phase required meticulously examining words derived from interviews and observations. This analytical process included coding, thematic analysis, developing core ideas, and clustering ideas. Collectively, these steps contributed to a thorough exploration of qualitative data, facilitating a meaningful interpretation of the research findings (Kiger & Varpio, 2020). The data analysis procedure of my study was the following:

First, coding in which I generated tags or labels to categorize and organize the rich qualitative data from in-depth interviews. In this study, I categorized the meaningful exploration of the data, allowing for the identification of patterns, themes, and connections related to the experiences of school leaders in developing adaptive strategies during disasters. Through coding, I uncovered the complexities of the responses of participants, ensuring a detailed analysis consistent with the research objectives.

Second, thematic analysis was an important method for extracting meaningful insights and patterns from qualitative data. In the context of this study, I identified, analyzed, and reported on recurring themes or

patterns in the narratives provided by school leaders during in-depth interviews. By applying thematic analysis to the responses, I uncovered the underlying threads contributing to a better understanding of how school leaders navigated and led during disasters.

Third, formulating core ideas entailed extracting central concepts or ideas from qualitative data gathered through in-depth interviews. In this study, core ideas were developed by distilling key insights and essential themes. By identifying and articulating these central concepts, I provided a coherent and insightful representation of the points of view of participants, thereby contributing to a thorough understanding of their roles and challenges in dealing with challenges.

Finally, clustering ideas entailed grouping related ideas and concepts gleaned from in-depth interviews and observations into major themes. In this study, I systematically grouped these ideas to create a coherent and structured framework that captured the essence of the experiences of school leaders in fostering adaptive strategies during disasters. This approach ensured that the qualitative information was presented meaningfully and interconnectedly, allowing for a thorough understanding of the key patterns and themes that emerged from the research data.

Trustworthiness of the Study

Establishing trustworthiness was a method used to persuade readers. This involved the deliberate pursuit of trustworthiness, which encompassed credibility, dependability, confirmability, and transferability. These criteria safeguarded the integrity of the research, building trust among readers and stakeholders in the outcome of the study (Shenton, 2004). The following criteria were explored to ensure the trustworthiness of this study:

Credibility in qualitative research refers to the truth value of the findings of the study, ensuring their correctness and accuracy. To establish credibility, I employed various techniques, such as triangulation, prolonged engagement with data, persistent observation, member checking, and referential adequacy (Maeda et al., 2023). Triangulation involves using multiple methods, data sources, observers, or theories to gain a more complete understanding of the phenomenon being studied. Prolonged engagement with data and persistent observation helped me gain a thorough understanding of the experiences and perspectives of participants. Member checking allowed participants to validate the findings and interpretations, adding another layer of participant input to the research process.

In the context of the study, credibility was pursued rigorously using a multifaceted approach. Long-term engagement with participants and persistent observation were essential for gaining a thorough understanding of their experiences and perspectives. Triangulating data from multiple sources, such as in-depth interviews, journals, articles, books, and audiovisual recordings, improved the reliability of the results. Member checking was also employed to allow participants to validate the findings and interpretations.

Dependability was the process of creating a comprehensive and well-documented audit trail that included not only the procedural steps taken during the study but also provided insights into the decision-making process. This thorough documentation served as a valuable resource for external reviewers, contributing to the dependability of the research by allowing for a rigorous examination of the logical and methodological journey of the study (Janis, 2022).

In the context of this study, the dependability of research findings went beyond conventional methods like audit trails, member checking, data triangulation, and additional measures. It involved seeking guidance from advisers or experts in the relevant field. By consulting with experienced individuals, I gained valuable insights and feedback, thereby maintaining a high level of dependability throughout the study.

Additionally, engaging in peer debriefing sessions offered an opportunity for critical reflection on research methods, interpretations, and potential biases. Through constructive discussions with peers or experts, I was able to challenge assumptions and enhance the quality of the work. Another essential practice was reflexivity, which involved continuously examining personal biases, assumptions, and values that may have influenced the research process and findings.

Furthermore, investigator triangulation, which involved collaborative research with multiple researchers from diverse backgrounds, strengthened dependability. The research findings were enhanced through discussions, consensus-building, and acknowledgment of differing viewpoints. These additional measures complemented traditional techniques and contributed significantly to ensuring the dependability and consistency of the research outcomes.

Confirmability occurs when credibility, transferability, and dependability are all fulfilled. Researchers must include markers such as theoretical, methodological, and analytical choices throughout the study so that others can understand how and why decisions were made (Kyngäs et al., 2020).

In this study, I meticulously embedded markers throughout the research process to emphasize the rationale for theoretical, methodological, and analytical decisions. These markers served as signposts, transparently detailing the thought processes underpinning each choice. By providing clear explanations of the "how" and "why" behind each decision, I aimed to invite readers and fellow researchers to comprehend the reasoning guiding the trajectory of the study. This deliberate approach not only reinforced the confirmability of the study but also fostered a transparent environment where stakeholders could scrutinize the research process.

In essence, the concept of an audit trail, often employed in qualitative research, is contextualized within this framework of transparency and rationale embedding. An audit trail traditionally involves documenting the steps taken in the research process, from data collection to analysis, to ensure transparency and replicability. However, in this study, the audit trail extends beyond mere documentation to include detailed explanations of the theoretical frameworks chosen, the methodological approaches adopted, and the analytical decisions made. Each decision is marked with clear justifications, allowing stakeholders to trace the logical progression of the study and understand the choices made at each juncture. By embedding markers that elucidate the rationale behind theoretical, methodological, and analytical decisions, this study not only reinforces its confirmability but also cultivates an environment of transparency and accountability. Stakeholders are invited to engage with the research process, scrutinize the choices made, and affirm the significance and objectivity of the study's findings. This approach ensures that the conclusions of the study are grounded in a transparent research process, enhancing its credibility and impact.

Transferability provided rich and contextually detailed descriptions in qualitative studies. It presented a vivid depiction of the research context, methods, and findings that helped readers make informed decisions about the applicability and transferability of the research findings to their specific contexts (Maxwell, 2021).

In this study, transferability was addressed through a meticulous approach focused on providing a vivid depiction of the research context and offering detailed information about the methods of the study. By adopting this strategy, the aim was to empower readers with the necessary insights to make informed decisions regarding the relevance and transferability of the research findings to their specific contexts. The comprehensive portrayal of the research context served to paint a clear picture of the setting in which the study was conducted. This included detailing relevant environmental factors, socio-cultural nuances, and

any other contextual elements that might influence the interpretation and application of the research findings. Providing detailed information about the methods of the study, including data collection techniques, analytical procedures, and any limitations encountered also ensured transparency and further enhanced the transferability of the findings.

Moreover, in order to bridge the gap between the research setting and potential transfer sites, collaboration with various stakeholders was imperative. Engaging with stakeholders allowed for a deeper understanding of the diverse contexts in which the research findings might be applied. By soliciting input from stakeholders with their different perspectives and settings, insights were gained into how the findings could be adapted and implemented effectively across various contexts.

Ethical Consideration

There were ten (10) key dimensions of ethical considerations in the research, including social value, informed consent, participant vulnerability, risk assessment, ensuring benefits and safety, protecting privacy and confidentiality, promoting justice, maintaining transparency, verifying the qualifications of researchers, ensuring adequate facilities, and involving the community in the process. By adhering to these dimensions, the study aimed to maintain the highest ethical standards, ensuring the well-being and rights of the participants while contributing socially valuable insights to the research field (Pietilä et al., 2020). The ten dimensions were highlighted in this study as follows:

Social value. This provided meaningful insights into societal needs and challenges. The essence lay in the transformative potential of researchers where the pursuit of knowledge was more than just an academic exercise but a deliberate effort to contribute solutions and understanding that could benefit the larger community. It strengthened the belief that research had the ability to address real-world issues, promoting positive change and improvement in societal conditions (Holmes, 2020).

In the context of this study, the emphasis on investigating the experiences of school leaders and the challenges in promoting adaptive leadership during disasters corresponded directly to the criteria of social value. By delving into their experiences, the study highlighted effective practices and approaches used by school leaders to foster adaptive leadership for alternative learning modalities during disasters. The findings of this study provided useful information and served as the foundation for policy recommendations. The study hoped to inspire the development of tailored leadership programs within the Department of Education (DepEd) Davao de Oro Division. Aside from its immediate impact, this research also served as a valuable reference for future endeavors, paving the way for ongoing exploration and development in this area.

Informed consent. It is a critical ethical consideration in research involving voluntary and well-informed participant agreements. This includes the orientation sessions, which provide detailed insights into the research process, objectives, and ethical considerations (Xu et al., 2020).

In this study, I obtained informed consent from all participants and held orientation sessions to ensure a thorough understanding of the research process, objectives, and ethical concerns. I also emphasized the voluntary nature of participation, assuring individuals that they could withdraw at any point during the research process. The decision on whether to participate in this research study was completely voluntary. Participants had the choice to decide whether to participate. If they chose to participate, they were required to sign the informed consent form. Participants had the right to withdraw their participation at any time and without providing a reason, even after signing the consent form. Their relationship with the researcher, if any, was not impacted by their decision to withdraw from the study.

Furthermore, to avoid coercion or undue influence, the principal investigator allocated sufficient time to explain to participants what the research study was about and provided them with adequate time to consider the information before deciding whether to participate. Written permission was obtained as tangible proof of their agreement, and orientation sessions were held to ensure a thorough understanding, including detailed insights into the research process, objectives, and ethical concerns. Emphasis was placed on the voluntary nature of participation, ensuring individuals that they could withdraw at any point during the research process.

Vulnerability of Research Participants. This refers to an individual or group at a higher risk of exploitation or harm due to specific characteristics or circumstances within the context of the research study. While it does not guarantee harm will occur, labeling someone as a 'vulnerable research participant' imposes an additional responsibility on the Research Ethics Committee (REC) to reduce the risk of harm (West-Oram et al., 2020).

In the context of this study, I considered the potential risks to participants and all individuals involved. The data collection process included in-person interviews, and precautions were taken to ensure that the interview questions and guide were not offensive in content. Participants were reassured of their autonomy by emphasizing their right to continue or withdraw from the study at any time. In instances where participants requested an online platform due to health issues or other risks, their preference was accommodated. Online interviews were made available upon the specific request of participants if attending face-to-face interviews posed risks to their well-being.

Risks, Benefits, and Safety. Risk is defined as the potential occurrence of a hazardous event that could impede the achievement of research objectives, with measurement based on the severity of the consequences and the likelihood of the event occurring. Ensuring participant safety will entail taking steps to reduce or eliminate potential risks. Simultaneously, researchers must weigh the potential benefits of the study, both to individuals and the broader community, to ensure that the research endeavor adheres to ethical standards and contributes positively to knowledge and societal well-being (Pandey et al., 2018).

In the context of my study, participation posed no known risks, although some participants might have experienced minor discomfort due to time commitments. Efforts were made to minimize any inconvenience. While direct benefits were not provided, involvement significantly contributed to the success of the study. As a token of appreciation, participants received a small gift, and any expenses incurred were reimbursed. Risks included potential difficulties, such as participants feeling uncomfortable or distressed while discussing their experiences. Balancing these risks, the benefits included providing valuable insights into educational practices, policy recommendations, and leadership development.

Moreover, to ensure safety, measures such as ethical considerations, informed consent, and the option to withdraw from the study focused on the participants' well-being and rights throughout the research process. To safeguard the privacy of vulnerable participants, such as LGBTQI community members, pregnant or nursing mothers, or senior citizens, identity concealment measures were implemented. Participants were advised to utilize face masks, caps, or other materials during online interactions to protect their identities. Additionally, technology was used to alter or de-identify voices during audio-recorded sessions. In-person interviews were conducted in carefully selected locations to ensure safety, convenience, and privacy while minimizing disturbances. These measures aimed to uphold participant privacy and comfort throughout the study.

Privacy and Confidentiality. This refers to a deep respect for individual autonomy, a desire to promote well-being, and the principle of trust. This will emphasize people's independence and self-determination

in the research setting. The commitment to promoting well-being demonstrates the researcher's genuine desire to positively impact the participants' welfare, ensuring that the research process benefits rather than harms them. The principle of trust emphasizes the significance of developing a relationship based on dependability and confidence between the researcher and participants (Fillmore et al., 2023).

In the context of this study, privacy and confidentiality were achieved by protecting participants' privacy during the conduct of the study in private settings, and appropriate security measures were implemented for online research or survey platforms. Participants were not coerced into revealing any personal information they did not wish to disclose to the researcher. The data or information provided by participants was treated with complete anonymity and utmost confidentiality through discrete coding. Individual identities were not used in any reports, presentations, or publications resulting from the research study.

All research data or information was securely stored in locked files (for material copies) or password-protected folders (for electronic copies). Only the principal investigator had direct access to the files. However, the Research Ethics Committee and other regulatory bodies were granted access to the information and data to verify and validate procedures and research data. Prior to data collection, informed consent was obtained from participants, clearly outlining the purposes of the research, the confidentiality measures in place, and their rights regarding the use of their data. Any identifiable information collected was anonymized or pseudonymized to further protect participants' privacy.

Upon completion of the research study, the data collected will be retained for three (3) years and then securely destroyed to prevent unauthorized access, use, or disclosure to any other party or the public or as prescribed by law. The data collected will be used solely for the purposes outlined in the study protocol, including presentation at research forums, conferences, and seminars, publication in academic journals or other scholarly publications, and informing educational policies or practices. Handling and disseminating the data responsibly and ethically is imperative, as well as maintaining confidentiality and protecting participants' privacy.

Justice. It is a concept based on assessing the impartiality and fairness of societal institutions that distribute benefits and disadvantages among their members. It delves into the ethical considerations surrounding the distribution of benefits and burdens to ensure an equitable sharing of resources, opportunities, and responsibilities (Damtew, 2018).

In the context of the research study, justice was achieved by carefully examining how the benefits and drawbacks of implementing alternative delivery modalities were distributed within the educational community. The study identified any disparities or inequalities in the distribution, ultimately providing insights that could be used to develop strategies for creating a more just and balanced educational environment during a crisis. Additionally, justice was upheld by using appropriate sampling techniques to select the participants. The research was conducted with the utmost expertise, ensuring that participants were fairly chosen and that the study was completed in the appropriate environment, with adequate facilities and expertise.

Transparency. This highlights the importance of communicating freely and explicitly about the research process, methodologies, and findings. It emphasizes the importance of making this research information easily accessible to respondents, stakeholders, and the public and maintaining personal responsibility and open communication throughout the qualitative research (Schäfer, 2023).

In the context of the research study, transparency was achieved by encouraging clear and open channels of communication, including explicit detailing of methodologies and findings. This commitment to

openness extended beyond academia to participants, stakeholders, and the general population. Participants gained a better understanding of the primary objective of the study and were able to share their experiences promoting adaptive leadership through alternative delivery modalities during disasters. Participants were also informed that they were taking an active role in the data collection phase by participating in in-depth interviews (IDI), which required them to respond to structured interview questions.

Furthermore, participants were informed that I would cover all expenses of the research project. Proper communication was maintained before the study began, with written permission obtained from the Division Office and the ten (10) schools in Davao de Oro.

Qualification of the Researcher. The notion of researcher qualification is consistent with the broader understanding that a qualified researcher possesses the skills and knowledge to effectively design, execute, and analyze research. Qualifications significantly impact the credibility and reliability of obtained results by highlighting the researcher's ability to navigate the difficulties and challenges of the chosen research domain (Fleming & Zegwaard, 2018).

In undertaking this study, I recognized the importance of possessing a range of qualifications and attributes to ensure its reliability and validity. These included moral fortitude, scientific competence, social awareness, cultural sensitivity, intellectual humility, vigilance, and preparedness. These standards served as guiding principles that informed my approach to research, ensuring that I conducted the study with integrity, thoroughness, and respect for ethical considerations. Regarding my qualifications as a researcher, I brought a combination of academic credentials, professional proficiency, and relevant training to the table. My background included training in school management and human resource management, which equipped me with the necessary expertise to delve into the specific area of interest addressed in this study. This foundational knowledge enabled me to navigate issues related to education and organizational management with confidence and competence.

Furthermore, I was guided by the support and expertise of my research adviser, whose experience and skills complemented my own. While I relied on the strengths of my adviser, particularly in areas such as research writing, I was fully qualified to lead and conduct the study independently. My decision to pursue this research stemmed from a conviction that I possessed the requisite competencies to undertake a detailed investigation, including careful study design and the development of meaningful research outcomes.

Adequacy of Facilities. This refers to the basic principles of research methods and the importance of undertaking thorough literature reviews. The accessibility of books, online journals, and unpublished dissertations helps to ensure the adequacy of facilities by supplying a great deal of information to the researcher. It highlighted the role of conducting comprehensive literature reviews during the research process. Adequate facilities include diverse and extensive resources like books, online journals, and unpublished dissertations (Denzin & Lincoln, 2018).

In this study, I ensured that all required resources were available and accessible. Books, online journals, and unpublished dissertations were utilized for additional readings and references, providing a diverse body of literature and studies to back up the relationship between the variables under study. Furthermore, I recognized that audio recorders, cameras, and other materials needed for the study were essential. I also sought approval from the relevant organizations and offices. I was confident that the study was performed and executed with adequate facilities, materials, and effective communication.

Furthermore, because the collected data were gathered in person, access to adequate facilities, such as question-and-answer session rooms and recording devices, was critical to the success of the study. This

included ensuring that the appropriate technology was provided within the interview rooms. Similarly, proper arrangements were made to ensure that the research interviews went smoothly.

Community Involvement. This involves collaboration, collective decision, and mutual respect between researchers and the community. This requires participation, collaborative decision-making, and a foundation of mutual understanding. Community members actively influence the research process, from developing research questions to interpreting results. The cooperative process acknowledges residents' diverse talents and insights into the research, ensuring that the study conforms with the community's needs, values, and priorities (Nolen, 2020).

In the context of this study, community participation was achieved by submitting a letter to the Division of Davao de Oro requesting permission and endorsement from public schools. The school division superintendent then approved the research study for the chosen schools. I was also given appropriate details to contribute to the proposed research output. Participation in the study was critical because the findings could serve as the foundation for developing initiatives and interventions to improve the adaptive leadership of school leader and their strengthen strategies through active involvement and participation during safety preparedness.

Finally, the findings of this study were disseminated to various stakeholders to increase knowledge, consciousness, and potential application. This communication occurred through proper channels, including correspondence with the DepEd Davao de Oro Office, dissemination to school district offices, integration into School Learning Action Cells (LAC) sessions, inclusion in training and seminar programs, and willingness to participate in other professional development activities. Moreover, the findings of the study had the potential to provide invaluable insight into how school leaders navigated challenges during disasters, helping to enhance disaster preparedness and behavioral interventions in academic institutions.

RESULTS AND DISCUSSIONS

Lived Experiences of the School Leaders in Implementing Alternative Learning Modalities Amidst Calamities

School heads shared their diverse experiences with implementing alternative learning methods. During interviews, they discussed the challenges and the most difficult aspects of adapting to alternative delivery modalities during crises. From the data gathered, there were five (5) themes that emerged from the responses of participants, namely: Strong Adaptability; Resilience and Problem-Solving; Challenges on Collaboration and Community Engagement; Innovative and Creative Solutions; and Empowerment and Professional Development.

Strong Adaptability

Strong adaptability emerges as a critical theme needed for navigating challenges posed by calamities and rapidly changing circumstances. School leaders discussed the importance of adaptive leadership during interviews, emphasizing the need to remain flexible, responsive, and open to learning new approaches. By cultivating adaptability, leaders can effectively support teachers and students, thereby ensuring the continuity of education even amidst crises. This adaptability is further strengthened through collaborative efforts with stakeholders and the integration of new technologies, which play pivotal roles in enhancing educational outcomes.

(Tursynova et al., 2023) found that flexibility enables adaptive leaders to promptly address challenges, implement innovative solutions, and foster a culture of continuous improvement within their institutions. This adaptability is crucial in an educational environment where teaching and learning are constantly

changing. Moreover, Barnová et al. (2022) explained that openness to learning and adopting new approaches ensures that school leaders stay updated on advancements in educational technology, pedagogy, and best practices.

Similarly, Waale et al. (2023) emphasized that adaptive leadership is not just beneficial but essential for driving positive change, promoting growth, and ensuring the success of educational initiatives. By remaining responsive and open to new ideas, adaptive leaders can effectively guide their schools through the complexities of modern education, thereby fostering environments that support student success and institutional excellence.

Resilience and Problem-Solving

In the school setting, resilience and problem-solving are paramount for navigating uncertainties and ensuring continuity in teaching and learning. Educators must be empathetic and resilient to understand and address the unique challenges faced by students and staff. Adaptive leaders who can face problems, ambiguity, and complexity with confidence and trust not only foster a supportive environment but also utilize adversities to develop essential leadership skills and practice patience.

A study conducted by Starrett et al. (2022) found that teachers exploring new instructional approaches often encounter uncertainties, which can be effectively addressed through collaboration in professional learning spaces. Similarly, embracing uncertainty in teaching may create new learning environments that challenge harmful preconceived notions and encourage the production of new knowledge. Similarly, Staples and Massey-Abernathy (2023) supported the idea that resilience equips school leaders with the ability to adapt and bounce back from setbacks, fostering mental well-being and enhancing their capacity to anticipate disruptions and implement robust contingency plans effectively.

Furthermore, Seibel et al. (2023) also revealed that in times of adversity, adaptive leaders showcase resilience by embracing change and uncertainty, thereby cultivating confidence and trust within their organizations. Smith et al. (2023) emphasized that they adeptly leverage adversities as opportunities for personal and organizational growth, honing their leadership skills, practicing patience, and fostering environments that prioritize learning and innovation.

Challenges on Collaboration and Community Engagement

Effective collaboration and community engagement are pivotal in modern education, particularly in leveraging community talents and resources to adapt delivery modalities. By fostering innovation and collaboration, educators can meet evolving educational needs and ensure that no student is left behind through strategic partnerships with stakeholders. Also, engaging local government units (LGU) and barangay officials is crucial in developing child-focused projects that enhance learning environments and community involvement.

Similarly, a study by Baas et al. (2022) found that through a community platform, school leaders gained access to a centralized repository where they could both contribute to and draw from a diverse array of educational resources. This repository may include contributions from third parties, providing educators with ample materials to explore and implement alternative delivery modalities effectively. In addition, Segkulu (2023) found that school heads play a pivotal role in fostering collaboration and innovation to address the evolving needs within educational settings. They can facilitate the utilization of community resources by ensuring secure and accessible visits, providing transportation options, offering incentives for community involvement, and promoting cooperation between teachers and Community Resource Centers.

Furthermore, Tomajin (2022) highlighted that by actively facilitating communication and coordination

among these stakeholders, school heads create a conducive environment where community resources can be leveraged to meet the dynamic educational requirements of students. This approach not only enriches the learning experience but also strengthens the partnership between schools and their local communities, fostering a mutually beneficial relationship aimed at achieving educational excellence.

Innovative and Creative Solutions

The pursuit of innovative and creative solutions has become increasingly crucial, especially in navigating challenges such as calamities and the integration of alternative delivery modalities. Teachers are encouraged to explore and implement innovative teaching approaches, leveraging varied online learning platforms and digital resources to adapt flexibly to changing circumstances. Emphasizing experimentation and feedback loops not only promotes the development of effective alternative modalities but also cultivates a culture where educators are empowered to employ diverse teaching methods and pedagogical approaches.

Consequently, Albino (2023) found that school leaders play a pivotal role in enhancing student learning outcomes and school performance by implementing innovative teaching approaches. Alrawashdeh (2022) highlighted that these approaches encompass integrating technology in classrooms, fostering project-based learning, and offering personalized instruction to meet diverse student needs effectively. In times of calamities or unexpected disruptions, school leaders must demonstrate flexibility and creativity in implementing alternative delivery modalities to ensure continuous learning for students. Hernandez et al. (2023) also found that this adaptability can include leveraging online platforms, distributing printed materials, or organizing remote learning sessions tailored to the situation at hand.

Empowerment and Professional Development

Empowerment and professional development are foundational to fostering a thriving educational environment. By empowering teachers to experiment with innovative methods of delivering learning, schools cultivate a culture of creativity and adaptability. School leaders play a crucial role in modeling adaptive behaviors, inspiring confidence, and nurturing resilience among educators, thereby creating a supportive atmosphere conducive to professional growth.

In connection, empowering teachers to innovate in their delivery of learning is crucial for enhancing educational outcomes. School leaders, through effective instructional leadership skills such as resource provision, instructional support, and clear communication, create an environment where teachers feel supported and motivated to explore innovative teaching methods (Soroño & Quirap, 2023). In addition, school leaders play a pivotal role in modeling adaptive behavior by embracing new ideas, taking calculated risks, and demonstrating accountability. By embodying these qualities, leaders inspire confidence and resilience among teachers, fostering a culture where educators feel empowered to navigate challenges and embrace change within the educational environment (Francisco & Cabigan, 2023).

Moreover, research underscores the importance of school leaders prioritizing continuous professional development (CPD) for teachers. CPD initiatives ensure educators remain abreast of the latest educational methodologies and trends, thereby enhancing their instructional effectiveness in the classroom. By investing in ongoing training opportunities, school leaders empower teachers to continually refine their skills, resulting in improved student learning outcomes and heightened overall school performance (Esmade, 2023).

Coping Strategies of School Leaders on the Challenges They Encountered in Implementing Alternative Learning Modalities

During the data analysis, the following five themes emerged from the strategies of participants in coping

with challenges while implementing alternative delivery modalities amidst calamity, namely: fostering effective communication; collaboration enhancement; effective leadership skills; being adaptive; and evaluation and assessment.

Fostering Effective Communication

Effective communication plays a pivotal role in the success of educational initiatives, particularly in navigating challenges and fostering collaboration among stakeholders. Developing comprehensive communication plans is essential to clarify stakeholders' roles, responsibilities, and the support they can expect. By actively involving parents in communication and providing opportunities for their input, schools can strengthen partnerships and promote a cohesive educational community.

Subsequently, school leaders play a pivotal role in developing communication plans that will clarify the roles, responsibilities, and support mechanisms for stakeholders within the school community. Establishing clear communication strategies ensures that parents, teachers, and other stakeholders have a comprehensive understanding of their contributions to the school's mission and objectives (Canatan et al., 2023).

Moreover, Wolfenden et al. (2022) explain the importance of effective communication in fostering trust and transparency, creating a cohesive and supportive environment where all members feel valued and informed. These plans should encompass regular updates, feedback mechanisms, and opportunities for open dialogue to address any concerns or issues that may arise promptly.

Collaboration Enhancement

Collaboration enhancement in education involves reaching out to parents to provide reassurance, guidance, and resources to support children's learning at home, thereby strengthening trust and collaboration among stakeholders. Empowering stakeholders in decision-making activities fosters a sense of ownership and commitment within the school community. Additionally, enhancing collaboration with community organizations leverages their resources and expertise to enrich student experiences and support continuous improvement initiatives based on stakeholder feedback.

In connection, enhancing collaboration with parents is essential for fostering a supportive learning environment. School leaders play a crucial role in reaching out to parents, offering reassurance, guidance, and resources to support children's learning at home, thereby strengthening trust and collaboration among stakeholders (Dederling & Pietsch, 2023). Similarly, trust between school leaders and teachers is pivotal in promoting collective teacher innovativeness, which is crucial for ongoing school enhancement. The relationship between school leaders' trust in teachers and teachers' collective innovativeness underscores the importance of trust in fostering a culture of innovation (Yulianti et al., 2020).

Moreover, establishing trust and collaboration among school leaders, teachers, and parents creates a supportive environment conducive to students' learning and development. This collaborative approach not only enhances student outcomes but also contributes significantly to overall school improvement efforts (Ang & Spencer, 2022).

Effective Leadership Skills

The effective leadership of school heads in any organization involves leading by example when addressing challenges, inspiring and mobilizing others, and adeptly handling conflicts and disagreements. By consistently exhibiting these qualities, leaders build credibility and trust among stakeholders, fostering a cohesive and productive environment through their effective leadership.

Furthermore, Dimitrovska et al. (2023) found that during crises, competent school leaders play a vital role in inspiring and mobilizing others around them, including staff, students, and the community, towards a

common goal, fostering unity and collaboration. Addressing conflicts and disagreements effectively is a crucial skill for school leaders, especially during crises, to resolve issues promptly, maintain harmony, and prevent conflicts from escalating. Similarly, research conducted by Virella (2023) underscores the importance of responsible leadership in facilitating learning during crisis events, emphasizing the significance of building and sustaining relationships within the school community and beyond to support students' needs over time, particularly benefiting vulnerable learners.

Moreover, Pastor et al. (2024) found that in crisis management, school leaders can enhance their effectiveness by staying calm and decisive, which not only instills confidence in others but also promotes stability and facilitates sound decision-making. Building credibility and trust with stakeholders is crucial, and this can be achieved through transparent, accountable, and integrity-driven leadership practices. Sinlapapiromsuk et al. (2023) suggested that by demonstrating these qualities, leaders can establish strong relationships with stakeholders, fostering trust and confidence in their leadership abilities, ultimately leading to more effective crisis management and overall organizational success

Being Adaptive

In today's dynamic educational set-up, being adaptive is crucial for school leaders and educators alike. It involves not only being responsive to changing circumstances and adapting plans quickly but also encouraging teachers and staff to adapt their teaching methods, particularly in the context of remote learning. School leaders play a pivotal role in fostering a culture of experimentation and adaptation, empowering educators to explore new teaching methods and pivot as needed. Embracing adaptability not only enhances educational resilience but also ensures that schools remain agile in addressing evolving challenges and opportunities in education.

In connection, Striepe et al. (2023) found that during times of crisis, school leaders have demonstrated remarkable adaptability by swiftly adjusting their plans to meet evolving challenges, regardless of the context. The COVID-19 pandemic prompted leaders to pivot and modify strategies promptly in response to unprecedented circumstances. Chingara (2022) revealed that the primary focus for these leaders was encouraging teachers and staff to adapt their teaching methods for remote learning, underscoring their responsiveness to the shifting educational landscape. Additionally, Anaktototy (2023) emphasized that fostering a culture of experimentation and adaptation enabled teachers to explore and implement new teaching methods while emphasizing continuous improvement and innovation in education.

Evaluation and Assessment

Evaluation and assessment in education are crucial for determining the effectiveness of alternative delivery modalities. Encouraging a hands-on approach involves actively assessing how these modalities impact learning outcomes and student engagement. Introducing regular self-reflection and seeking feedback from stakeholders allows educators to improve their teaching methods and adapt to student needs continuously. Monitoring the effectiveness of alternative delivery modalities ensures that adjustments can be made promptly to optimize the learning experience.

In the same vein, Ziduli and Buka (2023) reveal the important role school leaders play in actively engaging community leaders and stakeholders to evaluate the effectiveness of alternative delivery modalities. This collaborative approach ensures that diverse perspectives and insights are considered, providing a comprehensive assessment of their impact on the school community. Reis-Andersson (2023) also supported the idea that regular self-reflection and seeking feedback from community leaders, teachers, and students are essential practices for school leaders. This process allows leaders to assess their leadership

practices, identify areas for improvement, and enhance overall effectiveness in school management and community engagement.

Insights of School Heads in the Implementation of Alternative Learning Modalities Amidst Calamities

School heads shared their challenges posed by calamities, they also provided valuable insights into the implementation of alternative delivery modalities. Their experiences and strategies offer critical perspectives on adapting educational practices to ensure continuity during crises which four (4) themes emerged from the responses of the participants, namely: Embracing Flexibility and Adaptability; Fostering Decision-Making Skills; Provision of Support; and (4) Strengthen Communication and Technology Use.

Embracing Flexibility and Adaptability

Embracing flexibility and adaptability in educational settings involves preparing to swiftly address challenges and ensuring the success of alternative delivery methods. Educators must be skilled at adjusting their strategies to meet unexpected hurdles and maintain a proactive approach to educational planning. By cultivating these skills, educators can effectively navigate uncertainties, fostering resilience and continuity in learning despite external disruptions.

In addition, within educational settings, the ability of school leaders to swiftly adapt to challenges is crucial for ensuring the success of alternative delivery methods. Educators must demonstrate adeptness in adjusting strategies in response to unexpected challenges by maintaining a proactive approach to educational planning. By fostering preparedness and flexibility, educators can cultivate resilience and ensure continuity in learning, even amidst external disruptions (Abucay, 2023). In connection, Shaw (2022) also revealed that during the COVID-19 pandemic, school leaders confronted the daunting task of adapting to abrupt changes, including the shift to remote, hybrid, and simultaneous teaching models. To navigate these challenges effectively, leaders devised concrete plans that restructured school operations and encouraged innovative instructional strategies among teachers to maintain continuity in learning.

Furthermore, Harahap et al. (2022) revealed that during the earthquake, school leaders played a pivotal role in swiftly implementing vital measures like social distancing and health protocols. This highlighted the critical need for collaborative efforts between administrators and teachers to establish supportive conditions for successful adaptation within schools. Williams and Liou (2023) found that effective collaboration between school leaders and teachers is essential not only for responding promptly to crises but also for safeguarding the well-being and safety of students and staff, ensuring a cohesive and resilient educational environment.

Fostering Decision-Making Skills

Fostering decision-making skills is essential for leaders seeking to enhance their effectiveness in educational settings. By utilizing input from stakeholders, leaders can improve the quality of their decisions, fostering innovation and ensuring alignment with broader objectives. Actively seeking feedback on decision-making processes promotes continuous improvement and transparency within educational leadership. Empowering others to make decisions within their areas of expertise not only boosts collaboration but also encourages a sense of ownership and accountability throughout the organization.

Evidently, Shebli (2023) found that school leaders can be more effective in decision-making by utilizing input from stakeholders. Research suggests that involving stakeholders in the decision-making process can lead to better outcomes and increased support for decisions. In another case, Wong et al. (2023) suggest that to foster innovation and decision-making skills among school leaders, it is essential to encourage a culture of creativity and continuous improvement. By promoting innovation, leaders can enhance

ance their ability to make informed and forward-thinking decisions.

Moreover, actively seeking feedback on decision-making is crucial for school leaders to improve their practices. By soliciting feedback from various sources, such as teachers, students, and parents, leaders can gain valuable insights that can help refine their decision-making processes (Anjum, 2022). Similarly, school leaders empower others to make decisions within their expertise by providing them with the autonomy and authority to utilize their knowledge and skills in decision-making processes. This empowerment fosters a sense of ownership and responsibility among staff members (Bercovici et al., 2023).

Provision of Support

Providing training and support for teachers is needed to foster their professional growth and enhance educational outcomes. Empowering teachers with autonomy and support intensifies their commitment to student success and fosters a collaborative school culture. Continuous professional development initiatives ensure that teachers stay abreast of best practices and innovative approaches, contributing to ongoing learning and improvement across the educational community.

Moreover, Abdallah (2023) found that school leaders can provide extensive training and support for teachers to enhance their skills and knowledge, ultimately fostering a culture of continuous improvement and innovation within the school. Similarly, a study by Boyle et al. (2021) reveals that empowering teachers and staff with support and autonomy can intensify their commitment to the school's goals and vision. When teachers feel trusted and supported by school leaders, they are more likely to be motivated and engaged in their work.

In addition, Kareem et al. (2023) also found that offering autonomy to teachers allows them to make decisions related to their teaching practices, curriculum development, and classroom management. This autonomy can lead to increased job satisfaction and a sense of ownership over their work, which in turn can boost their commitment to the school.

Strengthen Communication and Technology Use

Strengthening communication and technology use is critical for creating an equitable learning environment. Addressing issues related to technology and resource access is essential to ensure that all students have equal opportunities for education, regardless of their socio-economic background. By actively bridging the digital divide, educators can guarantee that every student can participate fully in the learning process.

In connection, a study conducted by Junger et al. (2023) revealed that school leaders play a crucial role in addressing issues related to technology and resource access in education. They need to encourage teachers to update themselves in handling digital technologies in the classroom to ensure effective integration of technology into teaching practices. In addition, Reis-Andersson (2023) found that school leaders play a crucial role in promoting change for equity and inclusion in schools by utilizing their local knowledge to take small actions from the bottom up, opening doors for marginalized students.

Subsequently, (Anwar et al., 2022) suggested that to bridge the digital divide, school leaders need to actively promote digital transformation, integrate information technology into education, and innovate teaching models and methods to enhance teaching efficiency and quality. Liu et al. (2024) supported the idea that providing access to digital technologies, ensuring teachers have digital competence, and fostering a shared culture of digitalization are key aspects described by school leaders in the digitalization process within K-12 schools.

Implications for Educational Practice

The results highlight the need for adaptability, communication, collaboration, and technological integration in implementing alternative learning modalities during calamities. These findings suggest that educational institutions must prioritize developing flexible strategies to adapt to changing circumstances and ensure continuity in learning quickly. Moreover, fostering effective communication and collaboration among all stakeholders is essential for the successful implementation and support of these alternative modalities.

Moreover, the ability of school leaders and teachers to swiftly adjust plans and teaching methods in response to unexpected challenges is paramount. This adaptability ensures that learning can continue seamlessly despite disruptions. Schools should consider developing robust contingency plans that can be quickly enacted during crises. Maintaining transparent and consistent communication with stakeholders builds trust and ensures everyone is informed and engaged. Clear communication strategies help to alleviate uncertainties and foster a collective effort in managing the crisis. This implies the need for schools to establish and maintain open communication channels to keep all parties updated and involved. In addition, strengthening collaboration between school leaders, teachers, and the community is vital. This collaboration enhances the effectiveness of alternative delivery methods and supports teachers in adapting to new teaching approaches. Schools might consider creating support systems that facilitate teamwork and shared problem-solving during crises. Addressing the digital divide and ensuring equal access to technology and resources is crucial for the success of remote learning. The results indicate that exploring and integrating new technologies can significantly enhance the learning experience. Educational institutions should focus on providing the necessary technological infrastructure and training to both teachers and students to bridge this gap.

In connection, educational institutions may develop detailed contingency plans that include protocols for various crisis scenarios. These plans should be regularly reviewed and updated to remain relevant and effective. Schools need to implement robust communication systems that ensure timely and accurate information dissemination. This includes leveraging multiple platforms such as emails, social media, and school websites to reach all stakeholders. Schools may foster a culture of collaboration by encouraging teamwork among teachers and engaging with parents and community members. Providing professional development opportunities that focus on crisis management and collaborative problem-solving can also be beneficial.

Finally, addressing these problems may significantly improve the resilience and effectiveness of educational institutions during calamities, ensuring that learning continues uninterrupted and that students receive the support they need to succeed. These measures may be directed toward school administrators, policymakers, and community leaders who play a pivotal role in shaping and supporting educational practices.

Recommendations for Further Research

It has been witnessed that this research inquiry was successful in obtaining its main purpose, shedding light on the critical aspects of implementing alternative learning modalities during calamities. The study has provided valuable insights into the adaptability, communication, collaboration, and technological integration necessary for educational continuity in times of crisis.

Moreover, future research may focus on exploring the long-term impacts of alternative learning modalities implemented during calamities on student performance, school head, and teacher effectiveness. Given the rapid transition to remote learning, there is a need to assess the efficacy of various technological tools and

platforms used in education. Researchers may investigate which tools best support different learning styles and subject matters, thereby providing evidence-based recommendations for technology integration in education.

Finally, comparative studies between different regions or municipalities on how they adapted to educational disruptions caused by calamities may yield insights into effective strategies and common challenges. Such research can facilitate the sharing of knowledge and collaboration across borders, ultimately contributing to a more resilient global education system.

Concluding Remarks

This study aimed to explore how educational institutions managed to continue providing quality education amidst calamities, emphasizing the importance of quick adaptation to unforeseen challenges. By focusing on these areas, the research provides valuable insights into how schools can better prepare for and respond to future crises, ensuring that learning remains uninterrupted.

Throughout the research process, several difficulties were encountered, particularly in scheduling and conducting face-to-face interviews with participants. The different availability of participants and the challenges of coordinating interviews posed significant challenges. Despite these obstacles, the researcher was successful in obtaining meaningful data that shed light on the resilience and innovation demonstrated by teachers and school leaders.

One of the key realizations from this research is the importance of flexibility and preparedness in educational leadership. The ability of school leaders to make quick decisions and adapt plans in response to changing circumstances proved crucial in maintaining educational continuity. Additionally, the study highlighted the necessity of continuous professional development for teachers, equipping them with the skills and knowledge needed to navigate alternative teaching methods effectively.

Similarly, it is important to foster a culture of collaboration and communication among all stakeholders. Ensuring that teachers, students, parents, and community members are engaged and informed through transparent communication can significantly enhance the implementation of alternative delivery modalities. This collaborative approach not only supports the immediate educational needs during a crisis but also strengthens the overall resilience of the educational system.

The findings of this research provide a roadmap for educational institutions to enhance their preparedness and responsiveness to future crises. By addressing the challenges identified, such as the digital divide and the need for effective communication strategies, schools can better support their communities and ensure that education remains constant, even in the face of adversity. This research contributes to the ongoing topic of educational resilience and highlights the importance of innovation, collaboration, and adaptability in fostering a successful educational environment.

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