

Contextualizing Contingency Management Plan: A Disaster Risk Reduction Toolkit for School Principals in the Philippines

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Abstracts: This developmental study aimed to evaluate the disaster risk reduction and management (DRRM) capabilities, preparedness, and emergency response competence of Filipino school principals in Guimaras Island, while also developing a relevant contingency management planning toolkit tailored to the needs of the region. The study involved 92 deliberately selected participants, including public elementary and secondary school principals, as well as private school administrators. Data was collected using a researcher-made questionnaire consisting of three sections: DRRM Assessment Capability, Preparedness, and Emergency Response Competence. Descriptive statistics, including frequency counts, percentage analysis, mean, standard deviation, and rank, were used for data analysis. The results indicated that both public and private school principals in Guimaras demonstrated a high capability for risk assessment, substantial preparedness, and a significant level of competence in emergency response. Notably, their assessment capability was strongest in areas such as monitoring and evaluating DRRM programs and understanding Site Development Plans, while their least predominant skills were related to maintaining and strengthening lifeline systems and estimating equipment lifespans. In terms of DRRM preparedness, strengths included utilizing DepEd Orders for class suspensions during inclement weather and providing emergency contact directories. Weaknesses were identified in areas like capacitating student-led watch teams and preparing localized school policies for disaster preparedness. Regarding emergency response, school principals were found to be highly competent in managing personnel and coordinating with the Local DRRM Team. They were also proficient in providing necessities to teachers and students and reporting damages using the RADaR App. To address the identified gaps, a contextualized toolkit was proposed, tailored to the specific needs of Guimaras schools. This toolkit received excellent ratings from experts in terms of its attributes, objectives, content, usefulness, and self-help features.

Keywords: Disaster Risk Reduction, School Principals, Preparedness, Emergency Response, Toolkit.

1. INTRODUCTION

Calamities are unavoidable occurrences, often stemming from unsustainable development practices that disregard potential hazard impacts in specific locations. Their destructive potential can be mitigated when the local population possesses a comprehensive understanding of prevalent hazards and takes proactive measures to prevent or alleviate their effects (DRRM Manual, 2008). This issue transcends borders, affecting individuals worldwide. A disaster constitutes a significant disruption to the normal functioning of a community or society, resulting in extensive human, material, economic, or environmental losses that surpass the affected community's capacity to manage its resources (Campilla, 2016). While our geographical locations and climates may differ, we all share the risk of encountering various disasters, such as typhoons, fires, and earthquakes, especially in the Philippines. It is a global concern that requires collective attention and concerted efforts to minimize casualties during major events. Consequently, disaster risk reduction becomes a fundamental objective for every nation when confronted with a calamity. It encompasses the strategies and actions adopted by countries to diminish potential casualties when disasters occur (Campilla, 2016). Disasters do not discriminate based on age, making students just as susceptible to the adverse consequences of disasters as adults. In fact, due to their limited coping capabilities, students may be even more vulnerable. By educating learners about potential disaster threats within the school environment, schools can assume a crucial role in saving lives and aiding community members during times of crisis (Catangui, 2020).

Meanwhile, the Sustainable Development Goals (SDGs) represent a collection of 17 objectives unanimously agreed upon by nearly every nation worldwide on September 25, 2015, intended to shape the global agenda through 2030. This comprehensive framework is underpinned by a set of 169 specific targets and was the product

of two years of negotiations at the United Nations. Sustainable Development, as defined by the Brundtland Commission Report in 1987, entails a form of development that fulfills the current generation's needs while safeguarding the capacity of future generations to meet their requirements. In alignment with these SDGs, the establishment of Disaster Risk Reduction Management has been formulated to address specific goals, notably: Goal 3, which seeks to ensure healthy lives and well-being for all across all age groups; Goal 9, focusing on constructing resilient infrastructure, promoting sustainable industrialization, and fostering innovation; Goal 11, aiming to create inclusive, safe, resilient, and sustainable cities; and Goal 13, emphasizing the necessity of urgent action to combat the impacts of climate change.

One of these fundamental needs pertains to safety, which becomes particularly paramount during emergencies. Even when physiological needs are relatively met, new requirements emerge, known as safety needs (Maslow, 1943). These needs encompass the desire for protection from harm, a sense of security, and freedom from fear (Daft, 2013 as cited by Uysal). The nature of these safety needs can also evolve based on social concerns or the prevailing conditions in a person's or community's environment. For instance, individuals facing rising floodwaters may choose to abandon valuable possessions to prioritize their safety. Maslow's hierarchy of needs offers valuable insights that can aid school leaders and educators in comprehending the needs of students and in establishing an environment conducive to enhanced learning.

Given the considerations and constructs mentioned above, this research evaluated the assessment capability, preparedness, and emergency response competency of school principals. These assessments served as the foundation for the development of a specialized contingency management planning toolkit tailored to the specific context of Guimaras Island. Consequently, the said toolkit generated through this study is designed to assist school principals in devising comprehensive contingency management plans in the event of natural disasters and emergencies. This toolkit is hoped to function as the blueprint for the school's Disaster Risk Reduction and Management (DRRM) assessments, preparedness measures, and response initiatives when faced with disasters and calamities.

1.1. Context and Background of the Study

The Province of Guimaras is located in Region VI, situated between the islands of Panay and Negros within the Panay Gulf. It experiences a climate categorized as Corona's Type 1, characterized by two distinct seasons: a dry period typically spanning from November to April and a wet or rainy season covering the remainder of the year (guimaras.gov.ph). Over the past decade, Guimaras has faced three significant disasters that have profoundly affected its residents.

The first disaster occurred on August 11, 2006, when the oil tanker M/T Solar 1, chartered by Petron Corporation, sank off Guimaras' coast, resulting in a spill of more than 2.1 million liters (approximately 555,000 gallons) of bunker fuel. This incident remains the Philippines' worst oil spill, affecting approximately 1,500 hectares (over 3,700 acres) of the local ecosystem, including mangroves, seagrass, and coral reefs, according to the Department of Environment and Natural Resources (DENR) (Murga, 2019).

The second disaster transpired on August 3, 2019, when two motor boats, "Chi-chi" and "Keziah 2," carrying a total of 43 passengers, capsized en route to Jordan, Guimaras due to strong southwest monsoon winds exacerbated by Tropical Depression "Hanna." Only four crew members survived this tragic event. Within hours of this incident, another motorboat named "Jenny Vince" from Buenavista, Guimaras, carrying 40 passengers, also capsized due to powerful winds, resulting in the loss of 31 lives (Iloilo Strait Tragedy, 2019).

The third incident occurred on the afternoon of July 3, 2020, when one of the National Power Corporation's (NAPOCOR) power barges exploded, spilling an estimated 251,000 liters of fuel. While no injuries were reported, approximately 400 residents were evacuated due to spreading smoke from the bunker fuel, according to the Iloilo City Risk Reduction Management Office. The Coast Guard station in Iloilo reported the retrieval of around 179,300 liters of bunker fuel from the water's surface (Iloilo Oil Spill Incident, 2020).

Within the Schools Division of Guimaras, several schools have encountered challenges such as flooding during rainy months or high tide occurrences, fires caused by faulty electrical wiring in two schools, seven schools susceptible to earthquakes due to their locations, one high school prone to landslides, and another secondary school located in mountainous terrain that faced damage from a boulder falling on one of its instructional classrooms.

As a former teacher for three years in a particular elementary school on the island, which is part of this division, I witnessed firsthand the impact of disasters on education. On October 12, 2012, the school's Gabaldon Building, housing two classrooms and a library, was consumed by fire around 6 p.m. This incident resulted in damage to books and instructional materials, affecting both learners and teachers. To cope with the loss, two Grade 6 classes were relocated to vacant classrooms in another building. The incident disrupted the teaching and learning process, affecting learners' academic progress.

During the tenure of the researcher as a school principal for four years, he faced challenges at a school located near the sea and a pond. The school regularly experienced flooding during the rainy season, which disrupted classes and forced learners and teachers to relocate to the school pavilion during high tides. Additionally, the school was at risk of landslides due to its mountainous location. These environmental challenges resulted in reduced contact time for learners, impacting their academic performance. Teachers had to adapt their lesson plans to accommodate these interruptions, causing delays in covering the curriculum. Recognizing the critical importance of a contextualized contingency management plan to ensure uninterrupted education delivery, the researcher believed that such a plan can safeguard the quality of education, maintain learners' contact time, and enable teachers to cover the prescribed competencies within the academic year. This can also lead to a high level of work motivation, indicating a significant degree of drive, enthusiasm, and dedication among school principals toward work tasks and responsibilities (Siason, 2023), especially in ensuring the health and safety of the academic community.

One promising yet relatively unexplored area of study pertains to the assessment capability, preparedness, and emergency response competence of school principals in disaster risk reduction management. Given the hazards and disasters faced by learners and the responsibility of school principals to ensure their safety, it is essential to conduct assessments of their capabilities, preparedness, and emergency response competence. This research aimed to contribute valuable insights to the development of a contextualized contingency management plan toolkit that can be utilized by various schools in addressing these challenges.

1.2. Research Focus and Questions

This developmental study aimed to address the following questions: 1. What is the level of DRRM preparedness among school principals in Guimaras when taken as a whole and when grouped as a) private and public; and b) elementary and secondary? 2. What are the factors that contributed to the assessment capability, preparedness, and emergency response competence among school principals? 3. What Contextualized DRRM Contingency Management Planning Toolkit can be developed based on the result of the study?

2. METHODOLOGY AND METHODS

This research employed a developmental research approach to investigate and assess the disaster risk reduction management assessment capabilities, preparedness measures, and emergency response competencies of school principals within the Schools Division of Guimaras. The primary goal of this study was to serve as a foundation for the creation of a customized contingency planning toolkit. Developmental research, in the context of educational development, is a research methodology that systematically examines the design, development, and evaluation of instructional programs, processes, and products. This approach adheres to the criteria of maintaining internal consistency and effectiveness in instructional design, as articulated by Seels and Richey, as cited by Richey and Klein (2005). The essence of developmental research lies in generating knowledge grounded in data derived methodically from practical applications.

Developmental research serves as a pragmatic form of research that provides a means to scrutinize and verify hypotheses that were previously only conjectured, as well as to validate practices that may have endured unquestioned due to tradition. Furthermore, it serves as a pathway to establish novel procedures, techniques, and tools based on a systematic analysis of specific cases. In this capacity, developmental research can fulfill the dual role of formulating generalized conclusions or universal principles and generating context-specific knowledge that aids in problem-solving (Richey & Klein, 2005).

2.1. Respondents

This study was conducted in the Schools Division of Guimaras, DepEd- Region VI (Western Visayas), Philippines. This division has a total of 77 public elementary school principals, 17 secondary school principals, and 19 private school administrators. The DepEd- Schools Division of Guimaras has one Schools Division Superintendent and one Assistant Schools Division Superintendent. This number of administrative posts secures and assists the management of 113 schools in the five municipalities of the Province of Guimaras as shown in Table 1.

Table 1. Number of Public Elementary, Secondary, and Private Schools per Municipality in the Province of Guimaras

Municipality	No. of Public Elementary Schools	No. of Public Secondary Schools	No. of Private Schools
A	28	5	5
B	14	2	7
C	25	5	3
D	14	2	1
E	16	3	2
Total	97	17	18

As shown in Table 2, the participants of the study were the 92 purposely selected school principals of public elementary and secondary schools and school administrators of private elementary and secondary schools in the Schools Division of Guimaras.

Table 2. Distribution of Respondents

Municipality	F	%
A. Entire Group	92	100
B. Type of School		
Public	85	92
Private	7	8
C. Level of School		
Elementary	77	84
Secondary	15	16

When classified according to the type of school handled, 92% of the participants are public school principals while 8% are private school administrators. When classified according to the level of school handled, 84% are elementary school principals and 16% are secondary school principals. Private school administrators of integrated schools were given the freedom to choose either elementary or secondary so that their responses would be counted as one. Based on the data, only 7 out of 18 private school administrators were able to participate in this study and the rest were not due to school closure during the pandemic. Some private school administrators were reminded by calling, texting, and sending private messages to answer the Google form but were not able to do so.

2.2. Procedures of the Study

In adherence to ethical principles, the researcher designed a survey questionnaire based on established sources including the NDRRMC Gawad Kalasag: Comprehensive School Safety Criteria, Psychological PPDS, and OCD Training Need Assessment. This questionnaire underwent validation by experts in the field of Disaster Risk

Reduction and Management (DRRM). The questionnaire consisted of two sections: the "Personal Data Sheet" collecting information about participants' details, such as their school level and school type, and the "School Principals' DRRM Assessment Capability, Preparedness, and Emergency Response Competence" comprising a set of questions, with 20 items allocated to each category.

The proposed toolkit was formulated based on the findings of the study, addressing areas where school principals required strengthening in DRRM indicators. This toolkit was developed to cater to the specific DRRM needs within the school context. To achieve this, the existing toolkit provided by the Department of Education was adapted and revised. To assess the newly developed toolkit, an evaluation was conducted, focusing on various aspects including physical attributes, objectives, content, usefulness, and self-help features.

To ensure the questionnaire's ability to measure the intended constructs, the researcher followed a rigorous process of content validation. This involved seeking input from three experts in the field. According to Haynes, et al. (1995), content validity assesses the extent to which the elements of an assessment instrument are pertinent to and representative of the targeted construct for a specific assessment purpose. The instruments underwent validation by these three experts to evaluate their relevance, clarity, and appropriateness within the Philippine context.

The evaluation of the toolkit provided valuable feedback regarding its sufficiency and suitability for school principals in addressing DRRM contingency planning needs. As a result of the study's outcomes, a contextualized contingency planning toolkit was created. This toolkit's development process encompassed five phases, including (a) developing, validating, and testing the reliability of the researcher-made questionnaire, (b) gathering data through the questionnaires, (c) processing, analyzing, and interpreting the collected data, (d) crafting the Contextualized Contingency Management Planning Toolkit, and (e) subjecting the toolkit to evaluation by experts.

3. FINDINGS

3.1. Level of DRRM Preparedness among School Principals

The data in Table 5 revealed that as a whole, school principals and administrators have approved the Disaster Risk Reduction Management Action Plan, were to formulate localized policies and acquired complete spare DRRM equipment ($M= 3.51$, $SD= 0.470$). School principals of public schools are well-prepared ($M= 3.55$, $SD= 0.449$) while private school administrators need to comply with necessary preparations in terms of physical and material resources ($M= 2.99$, $SD= 0.490$). As to the type of school handled, both elementary ($M= 3.45$, $SD = 0.476$) and secondary school principals ($M=3.62$, $SD = 0.430$) are well-prepared.

Table 3. Level of DRRM Preparedness among School Principals

Municipality	SD	Mean	Interpretation
A. Entire Group	.470	3.51	Well-prepared
B. Type of School			
Public	.449	3.55	Well-prepared
Private	.490	2.99	Prepared
C. Level of School			
Elementary	.476	3.45	Well-prepared
Secondary	.430	3.62	Well-prepared

The result seems to imply that public school principals are aware of the disaster preparedness the school must undertake. DepEd Order No. 43 series 2021 discusses the school-based disaster preparedness and response measure to tropical cyclones, flooding, and other weather-related disturbances and calamities. This order is addressed to all public and private elementary and secondary school principals. The Department of Education encourages school principals to undertake measures for disaster preparedness and this measure must recognize and be responsive to the local setting and context. Private schools are also encouraged to refer to these guidelines in setting up their SDRRM.

The most dominant Disaster Risk Reduction Management (DRRM) preparedness was “can utilize the DepEd Order on suspension of classes during inclement weather” (M = 3.71, Rank 1), “have posted a directory of emergency contact numbers of relevant government agencies and other officials” (M = 3.68, Rank 2), and “have made sure that the corridors and pathways are unobstructed and all sharp and protruding objects that may cause harm is removed” (M = 3.64, Rank 3) as shown in Table 4.

Table 4. Level of DRRM Preparedness among School Principals

DRRM Preparedness	Mean	Description	Rank
can utilize the DepEd Order on suspension of classes during inclement weather.	3.71	Well-prepared	1
have posted a directory of emergency contact numbers of relevant government agencies and other officials.	3.68	Well-prepared	2
have made sure that the corridors and pathways are unobstructed and all sharp and protruding objects	3.64	Well-prepared	3
have streamlined process flows on DRRM emergency procedure	3.29	Prepared	4
have a capacitated student-led watching the team within the school	3.22	Prepared	5
have prepared localized school policies, guidelines and standards on disaster preparedness	3.17	Prepared	6

Meanwhile, the least dominant Disaster Risk Reduction Management preparedness were “have prepared localized school policies, guidelines and standards on disaster preparedness” (M = 3.17, Rank 6), “have a capacitated student-led watching the team within the school” (M = 3.22, Rank 5), and “have streamlined process flows on DRRM emergency procedure” (M = 3.29, Rank 4).

3.2. Assessment Capability, Preparedness, and Emergency Response Competence among School Principals

The data in Table 4 revealed that as a whole, school principals and administrators are highly competent in implementing immediate actions and appropriate responses to mitigate disaster impact (M= 3.51, SD= 0.491). School principals of public schools are highly competent (M= 3.55, SD= 0.463), while private school administrators exhibit less competence (M= 2.95, SD= 0.516). As to the type of school handled, both elementary (M= 3.48, SD = 0.509) and secondary school principals (M=3.32, SD = 0.378) are highly competent.

Table 4. Assessment Capability, Preparedness, and Emergency Response Competence among School Principals

Municipality	SD	Mean	Interpretation
A. Entire Group	.491	3.51	Highly Competent
B. Type of School			
Public	.463	3.55	Highly Competent
Private	.516	2.95	Competent
C. Level of School			
Elementary	.509	3.48	Highly Competent
Secondary	.378	3.63	Highly Competent

The result seems to reveal that public school principals are experts in terms of implementing immediate actions and appropriate responses after the occurrence of a hazard while private school administrators need to be capacitated through seminars and trainings on emergency response. The competence of the public-school principals is due to the training and capacity building in DRRM conducted by the DepEd. DepEd Order No. 21 series 2015 reiterated the responsibilities of the school principals as School DRRM Focal Person during emergency response. The responsibilities of the school principal include the following: (a) submit situation reports and provide real-time updates to the SDO, (c) accomplish and submit Rapid Assessment of Damages Report (RADaR) within 72 hours after any hazard or emergency via SMS, and (d) immediately contact via text, the Schools Division Office thru the SDS or the Division DRRM Coordinator once the school is identified or used as an evacuation center.

The most dominant emergency response competencies were “managing people and school personnel rendering duty” (M = 3.62, Rank 1), “coordinating with the Local DRRM Team” (M = 3.60, Rank 2), “determining rehabilitation and recovery needs based on detailed calculation of disaster damages, losses, and impacts” (M = 3.59, Rank 3) as indicated in Table 5.

Table 5. Assessment Capability, Preparedness, and Emergency Response Competence among School Principals

Competence of School Principals	Mean	Description	Rank
managing people and school personnel rendering duty	3.62	Highly Competent	1
coordinating with the Local DRRM Team	3.60	Highly Competent	2
determining rehabilitation and recovery needs based on detailed calculations of disaster damages, losses, and impacts.	3.59	Highly Competent	3
establishing command leadership in tactical response for actual emergency response or planned events such as festivals and conferences.	3.41	Competent	4
providing the basic needs of the teachers and Learners of the teaching and learning materials for continuity of education	3.21	Competent	5
reporting damages in our school using the RADaR App.	3.20	Competent	6

Meanwhile, the least dominant emergency response competence was “reporting damages in our school using RADaR App” (M = 3.20, Rank 6), “ providing the basic needs of the teachers and Learners of the teaching and learning materials for continuity of education” (M = 3.21, Rank 5), “developing incident objectives as reflected in the school disaster plan” (M = 3.41, Rank 5), and “establishing command leadership in tactical response for actual emergency response or planned events such as festivals and conferences” (M = 3.41, Rank 4).

3.3. Contextualized DRRM Contingency Management Planning Toolkit

The results of the present study showed that school principals are highly capable of conducting risk assessment, well-prepared, and highly competent in implementing the emergency response. Since DRRM is risk reduction and mitigation, there is a need to further enhance and develop the skills of the school principals as accountable persons for the learners’ safety and security and the school's property. The radar chart below shows the dispersion of means of the school principals’ responses on the survey on assessment capability, preparedness, and emergency response competence. Indicators with the lowest mean will be addressed and serve as the basis for developing the contextualized contingency toolkit.

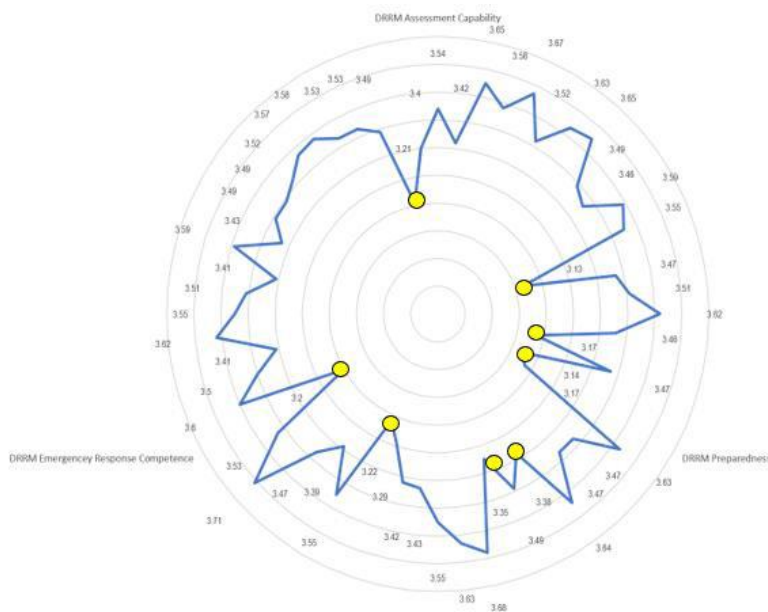
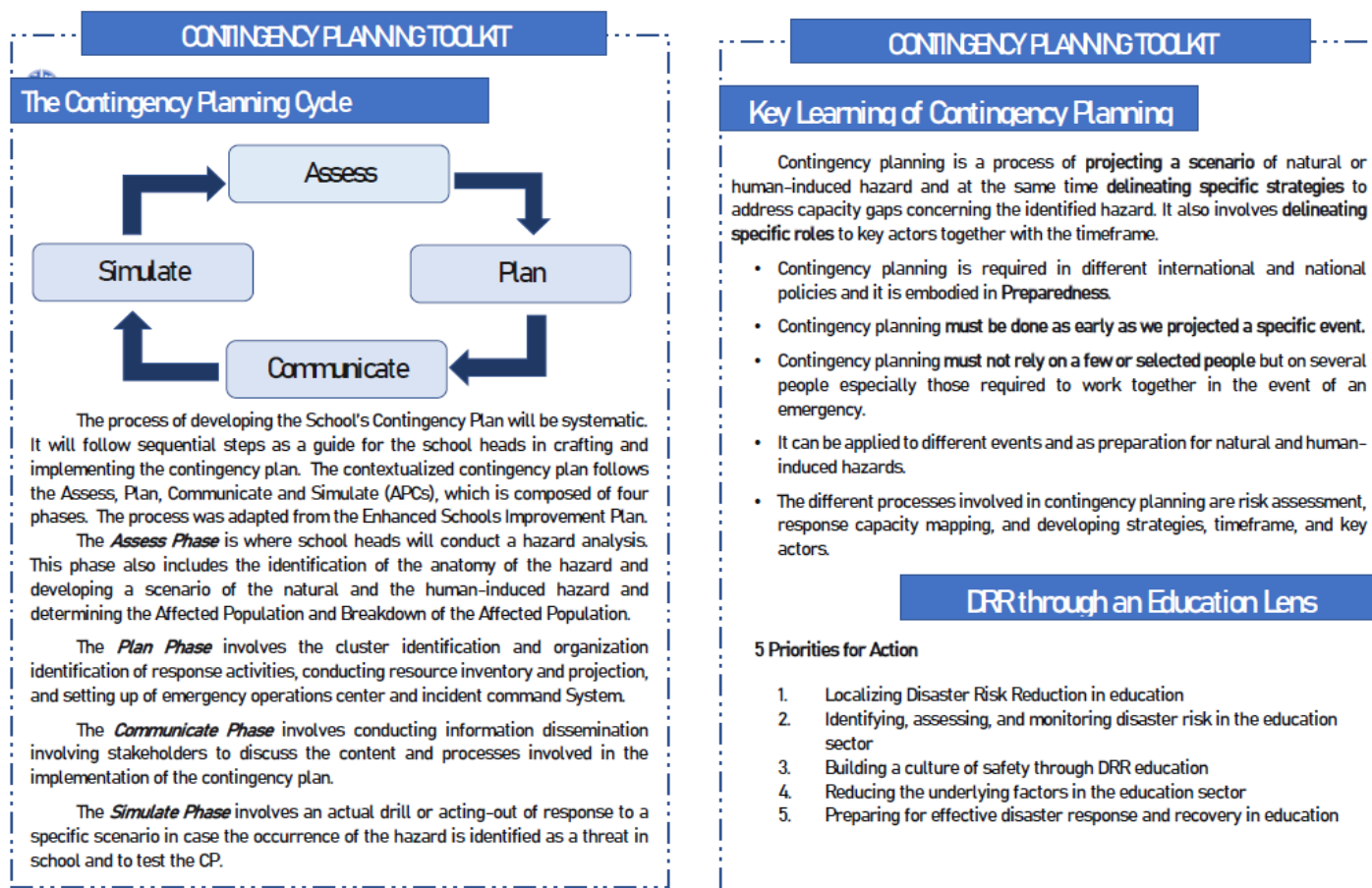


Figure 1. Dispersion of Means of the Level of Disaster Risk Reduction Management Assessment Capability, Preparedness and Emergency Response Competence Among School Principals.

As indicated in Figure 2, the Contingency Management Planning Toolkit is a comprehensive set of resources and tools designed to facilitate effective contingency planning and management within an organization or community. Contingency planning is a proactive approach to prepare for and respond to potential emergencies, crises, or unexpected events. It helps ensure that an organization or community can continue its essential functions and minimize disruptions when faced with adverse situations. The Contingency Planning Cycle is a structured framework that guides the development and implementation of contingency plans, and it consists of four key phases: Assess, Plan, Communicate, and Simulate.



Plan. Based on the assessment, contingency plans are created to address identified risks. These plans outline specific actions to be taken in response to various scenarios. Plans also specify how resources will be allocated during an emergency, including assigning responsibilities to individuals or teams. This phase includes training personnel on the contingency plans, so they are prepared to execute their roles effectively during a crisis.

Communicate. Effective communication is crucial during a crisis. Plans should outline how information will be shared within the organization and with external stakeholders, such as the public, government agencies, and partners. Organizations may also consider media relations strategies to manage public perception and provide accurate information during emergencies. Implementation of systems to quickly notify employees, community members, or relevant authorities in the event of an emergency.

Simulate. This phase involves conducting exercises, simulations, and drills to test the effectiveness of contingency plans initiated by school principals. These tests help identify weaknesses and areas for improvement. After simulations, schools should review the results and capture lessons learned. This feedback informs plan revisions and improvements.

The Contingency Management Planning Toolkit integrates these phases into a cohesive process, providing guidance, templates, and resources for each step. By following the Contingency Planning Cycle and using the toolkit, schools and their communities can enhance their resilience and response capabilities, ensuring they are better prepared to handle unexpected events and minimize their impact.

CONCLUSIONS

Public school principals demonstrate a high level of proficiency when it comes to conducting risk assessments to identify potential hazards and threats that could impact the school, its staff, and students. It appears that these public-school principals possess significant expertise and exhibit exceptional skills in hazard assessment. This competence might be attributed to their active participation in various training sessions and seminars focused on disaster risk reduction management, which has significantly contributed to their knowledge and skills in identifying and evaluating hazards.

The findings indicate that private school principals or administrators are also capable of conducting risk assessments and are proficient in implementing necessary disaster preparations within their schools. However, there is a need to enhance their capacity to execute precautionary measures before the commencement of classes, including tasks such as school facility maintenance and equipment inventory. Private schools should consider organizing activities like Brigada Eskwela to ensure the school's readiness and encourage stakeholder participation in creating a safe, inclusive, gender-sensitive, and motivating learning environment.

As school managers responsible for disaster risk reduction, school principals play a pivotal role in implementing various programs, activities, and projects related to disaster risk reduction. As the lead individuals in DRRM, school principals are expected to acknowledge advisories and reminders from the Schools Division Superintendent (SDS) and/or the Schools Division Office (SDO) DRRM Coordinator and take the lead in conducting essential capacity-building activities such as multi-hazard drills and other disaster prevention, mitigation, and preparedness initiatives within the school.

Both school principals and/or administrators, in their capacities as school managers and curriculum implementers, should have a thorough understanding of the contingency management plan to be adopted within the school setting. As school managers, they should be familiar with protocols to follow in the event the school is utilized as a temporary evacuation center for a maximum of fifteen days. Additionally, school principals should effectively manage personnel and school staff assigned duties during disasters. In their role as curriculum implementers, school principals should take the lead in implementing and adapting alternative delivery methods for continuous learning as outlined in the basic education learning recovery and continuity plan.

Ensuring the safety and security of students is a collective responsibility that extends beyond the school principal or administrator. Teachers, who are at the core of classroom instruction, also have a role to play by providing assistance and guidance to students during national simulation earthquake drills. The active participation of school principals and administrators in various DRRM seminars and training programs can significantly contribute to the enhancement of their knowledge and skills in this regard.

A Contingency Management Planning Toolkit, which has received an outstanding rating across all aspects, serves as an effective guide for school principals in formulating the School Improvement Plan. The overall rating provided by experts indicates that this toolkit can effectively address the safety needs of the school, students, teachers, school staff, and property. This underscores the idea that with the support of teachers and external stakeholders, school principals can deliver quality and responsive education within a child-friendly, gender-sensitive, safe, and motivating educational environment.

Disclosure Statement

The authors report that there are no competing interests to declare.

Data Availability Statement

The data supporting this study's findings are available from the corresponding author, Gever G. Jauro, through gever.jauro@deped.gov.ph upon reasonable request.

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