

Examining Teachers' Awareness, Practices, and Challenges in School Disaster Risk Reduction and Management Implementation in East District, Bayugan City Division

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ABSTRACT

This study examined the level of awareness, practices, and challenges encountered by teachers in the implementation of School Disaster Risk Reduction and Management (SDRRM) in the East District of Bayugan City Division. Employing a descriptive-correlational design, this study was participated by 113 teachers through Slovin's formula and cluster sampling. The data gathered were analyzed employing means and Spearman's Rank Correlation. Findings revealed that teachers exhibit high levels of awareness as well as very satisfactory levels of practice across all indicators of the Comprehensive School Safety framework which includes: Enabling Environment, Safe Learning Facilities, School Disaster Risk Management, and Disaster Risk Reduction in Education. It was found that there is a significant relationship between the teachers' level of awareness and practices across all indicators. Nevertheless, common challenges encountered by the teachers were identified namely: inadequate funding, insufficient resources, lack of collaboration, and inadequate training. Grounded in the study's findings, an enhanced SDRRM plan was proposed to reinforce the challenges identified. The study underlines the importance of sufficient resource allocation, continuing professional development, and widened linkages in creating a safe and resilient school community.

Keywords

Disaster Risk Reduction and Management; awareness; practices; comprehensive school safety; enabling environment

INTRODUCTION

A satisfactory implementation of a School Disaster Risk Reduction and Management lies in the hands of those who execute the plans and strategies. The interconnection of awareness and practices in terms of the implementation of School Disaster Risk Reduction and Management enables teachers to demonstrate efficiency in carrying out SDRRM mechanisms. Educating communities about potential risks and how to prepare for and respond to disasters is crucial for building resilience and ensuring the effective implementation of DRR measures (Asih et al. 2023). From being knowledgeable on the legal bases of SDRRM to being compliant to the standards and procedures of SDRRM, teachers create a school community that is proactive and responsive to the needs of the learners. Thus, both are highly important since the teachers are at the frontline in the implementation of SDRRM.

The Philippine government established Republic Act No. 10121, also named as the "Philippine Disaster Risk Reduction and Management Act of 2010" that institutionalize

policies, structures, and mechanisms in addressing disasters. As a means of recognizing the needs in creating a proactive community, the Philippine Disaster Risk Reduction and Management Act of 2010 provides a framework that emphasizes disaster preparedness and a community-based mechanism in addressing disasters in general (Official Gazette of the Republic of the Philippines, 2010). This holds a significant part of the teachers' knowledge on DRRM for this underscores the other orders issued for the implementation of DRRM in schools.

Moreover, the Department of Education established DepEd Order No. 37, series of 2015 otherwise known as "The Comprehensive Disaster Risk Reduction and Management (DRRM) in Basic Education Framework" that helps strengthen the implementation of School Disaster Risk Reduction and Management mechanisms. This gives emphasis on maintaining quality education even during the times of disasters. This guides teachers in making efforts to promote quality education along with their aim in creating a resilient school community.

The East District of Bayugan City Division has nine (9) public elementary schools that are situated in areas that are exposed to natural disasters such as flooding and landslides. Just like any other schools nationwide, public elementary schools in the East District participate in DRRM-related activities such as National Simultaneous Earthquake Drill (NSED) which is done quarterly and comply with contingency planning which is one of the numerous documents that are needed in SDRRM. However, it is concerning to note that teachers are supposed to participate and comply with such activities and documents without undergoing formal orientation.

Trainings and seminars have been conducted; however, equitable access to these opportunities has not been ensured, as only selected representatives were sent to participate. For instance, while the conduct of the National Simultaneous Earthquake Drill (NSED) requires adherence to a Standard Operating Procedure (SOP), many schools in the East district appear to carry out the activity merely to fulfill compliance requirements. This practice undermines the primary objective of the drill, which is to effectively prepare learners and staff by familiarizing them with the SOPs. In fact, the study of Ronquillo (2020) found that practice drill reduces time wastage during an actual evacuation.

The effective implementation of School Disaster Risk Reduction and Management (SDRRM) is rooted in comprehensive awareness and adherence to standard-based practices. This highlights the crucial role of teachers' awareness and practices in ensuring that SDRRM fulfills its purpose as a functional program focused on its four key pillars: preparedness, response, recovery, and mitigation. Conversely, a low level of awareness and inadequate practices among teachers in executing SDRRM may result in its ineffective implementation. The effectiveness of disaster management are the people who are trained and knowledgeable in case of emergencies (Gupta, 2020).

This study aimed to examine teachers' level of awareness, practices, and the challenges they face in implementing SDRRM. Based on the findings, an enhanced SDRRM plan was proposed for each school in the East district. This enhanced plan served as a foundation for future efforts to improve the program's implementation and effectiveness.

Theoretical Framework

This study was primarily anchored on the Protection Motivation Theory (PMT) which was introduced by Ronald W. Rogers in 1975. This theory shows how motivated the people are as they perform preventive measures in various hazardous situations. PMT has a significant function in DRRM as it discusses how individuals come up with a decision in terms of dealing with threats brought by certain hazards.

The PMT provided a valuable framework for assessing and evaluating teachers' awareness and practices when implementing School Disaster Risk Reduction and Management (SDRRM) with the Comprehensive School Safety (CSS) Checklist. The Protection Motivation Theory explains how people perceive threats and their abilities to adopt preventive measures, which makes it useful for examining teachers' involvement in SDRRM. It was found in the study of perceived vulnerability was one of the important predictors of preventive behaviors (Faryabi et al. 2023).

Threat appraisal in PMT entails determining the severity of a threat and the chance of being affected by it. For teachers, this involves being aware of the threats posed by natural disasters as well as their schools' special vulnerabilities. High awareness allows teachers to see the value of activities such as hazard identification, student-led hazard mapping, and risk assessments, as specified in the CSS Checklist. Teachers with higher education levels may have a deeper understanding of risk management principles and the possibilities for protecting school facilities (Papcunová et al, 2023) Consequently, this understanding allows children to comprehend the consequences of inaction and the importance of disaster preparedness. Teachers, for example, who understand the need of hazard mapping are more likely to actively detect potential threats in school settings. This knowledge serves as the foundation for effective disaster risk reduction and promotes the development of a safe and prepared school environment, which is a fundamental component of the CSS Checklist.

In PMT, coping appraisal refers to the perceived success of preventive activities as well as one's confidence in taking them. In the context of SDRRM, this refers to how teachers apply disaster management strategies. It entails activities such as creating contingency plans, conducting safety drills, and overseeing school disaster risk strategies. The teachers' capacity in carrying out emergency management plans relate to the theory's coping appraisal. Teachers who have a high coping appraisal are more likely to implement these techniques effectively. For example, they connect their contingency plans with hazard mapping findings and train staff and students on disaster protocols. These actions help to achieve CSS Checklist aims, such as building safe learning environments and incorporating disaster risk reduction throughout education. Therefore, PMT is considered as the basis for understanding teachers' level of awareness and their practices in the implementation of DRRM in schools.

Objective of the Study

This paper sought to study the level of teachers' level of awareness and their practices in the implementation of the Disaster Risk Reduction and Management.

RESEARCH METHODS

Research Design

A descriptive correlational design was used in this study. By definition, descriptive correlational design is an approach in quantitative research that examines the relationship between two variables. This design was used appropriately to determine whether a significant relationship between the level of teachers' awareness and their practices exists. Through this design, the researcher was able to assess the strength and direction of relationships among variables of interest.

Research Locale

This study was conducted in the Division of Bayugan City which is situated within Agusan del Sur and is a part of Caraga Region. The said division has seventy (70) schools in total

and these schools belong to the five (5) districts, namely North District, East District, West District, South District and Central District.

The study was conducted in the East District, particularly the public elementary schools which includes a total of nine (9) public elementary schools. Additionally, the district consists of barangays that primarily experience natural hazards such as flood and earthquake which contributes to its aptness in becoming the central subject of the study.

Research Instrument

The instrument used in this study was the Comprehensive School Safety (CSS) checklist of the DRRM for the Gawad KALASAG to measure the teachers' level of awareness and teachers' level of practices in DRRM. The checklist covered the four essential components of comprehensive school safety, namely: (1) Enabling Environment; (2) Pillar 1: Safe Learning Facilities; (3) Pillar 3: School Disaster Risk Management; and (4) DRR in Education. The questionnaire used five-point Likert Scale type of measurement. The instrument of this study was composed of two (2) parts which were significant in creating valuable and in-depth analysis of this study.

Part one (1) determined the teachers' level of awareness on DRRM in school. This was composed of the four major components of the Comprehensive School Safety checklist (Enabling Environment, Safe Learning Facilities, School Disaster Risk Management, and DRR in Education). Each component contained items specific to the concept that corresponds to itself. The data obtained out from these items contributed in identifying the extent of their knowledge in DRRM implementation. Moreover, every component in part I included an open-ended question that sought to know the challenges encountered by the participants regarding their level of awareness about a particular component.

Part two (2) used statements that had identified the level of practices done by the respondents in the implementation of DRRM in schools. Likewise, it contained four major components of the Comprehensive School Safety checklist (Enabling Environment, Safe Learning Facilities, School Disaster Risk Management, and DRR in Education). The data that the researcher gathered in this part of the instrument were used in identifying the participants' level of practice of DRRM in school. Finally, following each component in part 2, asked an open-ended question to find out what are the participants' challenges with their level of practice in a certain component.

Data Gathering Procedure

The process of carrying out this study included multiple important steps, carefully planned and done to make sure the research was thorough and followed ethical standards.

First, the researcher sent a letter of intent to the district in-charge of the East District in the Schools Division Office of Bayugan City. The letter contained the objectives, methods, and potential benefits that the study could offer. This sought the consent to carry out the study, particularly the gathering of data. As the researcher got a permission to carry out the study, the instrument then was used to administer the survey to the School Heads and DRRM coordinators and teachers of the public elementary school teachers of the East District.

This study strictly ensured the adherence to ethical standards in the conduct of research. Before the conduct of data collection, an informed consent was obtained from all participants. Participation of this study was entirely voluntary and all participants were assured of the confidentiality of their responses. Rest assured, none of the participants' confidential information and identity were disclosed.

Afterwards, when the data were already complete, those were used in the data analysis. Through the statistical tools, the quantified data were used for interpretation and in making conclusions which contributed to the depth of this investigation.

Data Analysis Plan

Statistical Treatment

To analyze and make interpretations of the data gathered regarding the teachers' level of awareness, level of practice and the challenges encountered, this study used the following statistical tools suitable for this study.

Weighted Mean. This was used to calculate for the average of all the responses in each Likert Scale item, which assessed the teachers' level of awareness and practices in carrying out Disaster Risk Reduction Management (DRRM) in schools. The mean was the basis in classifying the equivalent verbal description from the pre-determined range of means.

Standard Deviation. This study utilized standard deviation to measure the variability or dispersion of responses from the mean. This provided implication as to how consistent were the respondents in answering each item.

Spearman's Rank Correlation. This study employed Spearman's Rank Correlation to examine the relationship/correlation between ranked variables linked to teachers' awareness and practices in disaster risk reduction and management in schools.

RESULTS AND DISCUSSION

Table 1. Level of teachers' awareness in School Disaster Risk Reduction and Management in terms of Enabling Environment

Indicators	Weighted Mean	SD	Verbal Description	Awareness Level
1. I am aware that there are adopted / adapted / localized at least 3 existing policies relating to (DRRM) Climate Change...	4.25	0.722	Agree	High
2. I am aware that there is a formed and functional School DRRM Team with the participation of the Supreme Student ...	4.39	0.720	Agree	High
3. I am aware that the school has a comprehensive School DRRM Plan.	4.25	0.747	Agree	High
4. I am aware that the school budget supports regular DRRM activities	4.08	0.807	Agree	High
5. I am aware that the school conducted student-led school watching and hazard mapping ...	4.18	0.841	Agree	High
6. I am aware that the results of student-led school watching and hazard mapping ...	4.21	0.783	Agree	High
7. I am aware that the copies of the School Report Card (SRC) are presented ...	4.33	0.758	Agree	High
8. I am aware of the data collection and consolidation of programs and activities on DRRM, covering the 3 Pillars ...	4.10	0.902	Agree	High
9. I am aware that the Rapid Assessment of Damages Report (RADaR) is submitted to Central Office, within 72 hours after the..	4.19	0.787	Agree	High
10. I am aware that the school has completed 100% of the DRR-related questions in the Education Management Information System ..	4.12	0.742	Agree	High

11. I am aware that the school has established partnerships that could be tapped to support its DRRM programs and activities, including those during and after a disaster	4.28	0.734	Agree	High
Overall Weighted Mean	4.22	0.632	Agree	High

Legend: 1.00-1.49-Strongly Disagree/Very Low; 1.50-2.49-Disagree/Low; 2.50-3.49-Uncertain/Average; 3.50-4.00-Agree/High; 4.50-5.00-Strongly Agree/Very High

Item 4 “school budget supports regular DRRM activities” got the lowest mean of 4.08 or “Agree” which corresponds to the participants’ “High” level of awareness. Teachers are acquainted with the activities related to Disaster Risk Reduction and Management they can receive to be funded by the school. Teachers’ awareness may be influenced by their observations and involvement in DRRM activities in the school, which were funded through the school’s budget for Maintenance and Other Operating Expenses. Nevertheless, while they are aware of DRRM activities, they may perceive budget allocation and financial support as inconsistent and insufficient. This, therefore, explains its placement among other items in enabling environment, considering that it has the lowest weighted mean.

An average weighted mean of 4.22 or “Agree” means that the participants’ level of awareness in terms of enabling environment was “High” that they are aware of the policies, functional team, student-led hazard mapping, Rapid Assessment of Damages Report (RADaR), and partnerships that support DRRM programs in school.

The result suggests that the participants’ level of awareness is high due to their knowledge on the legal frameworks and policies that define the rights and duties of stakeholders, the functional team with designated authorities to lead during crises, the appointing of DRRM focal person to coordinate with the Local DRRM Council (LDRRMC), and develop financial strategies to support initiatives related to the Comprehensive School Safety (CSS) program.

Teachers being aware of the localized policies, functional teams and financial mechanisms that enable the school to support DRRM-related activities contributes to an effective implementation of DRRM in school. GADRRRES (2022) affirms how enabling environment in DRRM creates space for safety and healthy school community through systems and policies that ensure learning continuity and promote a culture of safety and resilience.

Level of Awareness in Safe Learning Facilities

Table 2 presents the participants’ level of awareness in terms of Safe Learning Facilities. The data show that all items from 1 to 4 were rated “Agree” which corresponds to “High” level of awareness in Safe Learning Facilities. Item 2 “School DRRM Team conducted risk assessment of school facilities, in coordination with the division engineer” obtained the highest weighted mean of 4.24 which equates to “Agree” or “High” level of awareness. This implies that teachers are acquainted with the conducted risk assessment of the school buildings. Their awareness may be influenced by their experience in conducting risk assessment in their respective classrooms, especially when it is their own classroom that is being assessed.

Meanwhile, item 1 “school building/classroom components are in accordance with DepEd and National Building Code” obtained the lowest weighted mean of 4.14 or “Agree”. This reveals a “High” level of awareness of the participants regarding the school buildings that are in accordance with the DepEd and National Building Code standard design and specifications. Teachers’ awareness in such specifications may be rooted with the instructions given by the School Heads during school monitoring, especially those instructions that they need to consider in their classroom. However, this obtained the lowest

weighted mean among other items in safe learning facilities, because some school buildings or classrooms may not fully meet the DepEd and National Building Code specifications such as smooth wall finish, smooth flooring, fixed and no leak roofing, and adequate ventilation which affect their awareness on the compliance of such standards.

Table 2. Level of teachers’ awareness in School Disaster Risk Reduction and Management in terms of Safe Learning Facilities

Indicators	Weighted Mean	SD	Verbal Description	Awareness Level
1. I am aware that the school building / classroom components are in accordance with DepEd and National Building Code approved standard design and specifications	4.14	0.887	Agree	High
2. I am aware that the School DRRM Team conducted risk assessment of school facilities, in coordination with the division engineer and other partner agencies and stakeholders.	4.24	0.792	Agree	High
3. I am aware that appropriate action on the findings is included in the Annual Implementation Plan and School DRRM Plan.	4.17	0.811	Agree	High
4. I am aware that the School Heads are oriented with the roles and functions of the school in camp management vis-à-vis the LGU and DSWD as per Joint Memorandum Circular No. 2, series of 2021 ...	4.16	0.726	Agree	High
Overall Weighted Mean	4.18	0.694	Agree	High

Legend: 1.00-1.49-Strongly Disagree/Very Low; 1.50-2.49-Disagree/Low; 2.50-3.49-Uncertain/Average; 3.50-4.00-Agree/High; 4.50-5.00-Strongly Agree/Very High

An average weighted mean of 4.18 or “Agree” was rated that means a “High” level of awareness of the safe learning facilities. This reveals that the participants are aware that Disaster Risk Reduction and Management in schools has standard designs and specifications for the school buildings as well as the conduct of risk assessment of the school DRRM team of the school facilities in coordination with the division engineer, and the inclusion of the actions taken on the findings to the Annual Implementation Plan and School DRRM Plan.

The result demonstrates a high level of teacher awareness regarding the integration of DRRM requirements into school infrastructure and planning. Their understanding strengthens the effectiveness of safety measures and contributes to a readiness culture in the school community.

Teachers’ high level of awareness on safe learning facilities plays its vital role in ensuring that school spaces remain safe as this directly impacts the protection and well-being of the school community. Arao-Arao et al. (2024) affirms that natural hazards, human-induced hazards, and environmental hazards, collectively impact the safety of the learning environment, with a specific focus on the safety of school buildings and facilities.

Level of Awareness in School Disaster Risk Management

Table 3 presents the teachers’ level of awareness on School Disaster Risk Management. The data reveal that all items from 1 to 18 were rated “Agree” which means a “High” level of awareness. Item 6 “the school has available, accessible, and adequate first aid kits” obtained the highest weighted mean of 4.25 or “Agree” which means “High” level of awareness. It means that teachers are aware of the accessible first aid kits in every instructional and non-

instructional room in schools. Mainly, the fact that teachers are the ones who prepare first aid kits inside the classroom, it is understandable that they have a high level of awareness on this item from Safe Learning Facilities.

Table 3. Level of teachers' awareness in School Disaster Risk Reduction and Management in terms of School Disaster Risk Management mechanisms

Indicators	Weighted Mean	SD	Verbal Description	Awareness Level
1. I am aware that the school has a hazard-specific Contingency Plan...	4.21	0.695	Agree	High
2. I am aware that 100% of learners and their families have accomplished the Family Preparedness Plan	3.74	0.810	Agree	High
3. I am aware that the school has a learners family reunification plan that is clearly	3.91	0.740	Agree	High
4. I am aware that the school has established a school personnel and learners tracking system.	4.13	0.771	Agree	High
5. I am aware that the Hazard and evacuation maps are located in conspicuous places ...	4.20	0.730	Agree	High
6. I am aware that the school has available, accessible, and adequate first aid kits.	4.25	0.735	Agree	High
7. I am aware that the school has at least 3 essential and functional pieces of equipment.	4.14	0.687	Agree	High
8. I am aware that the school conducted hazard-specific drills ...	4.24	0.756	Agree	High
9. I am aware that the school has established functional early warning system	4.16	0.748	Agree	High
10. I am aware that the school has a ready go-bag or equivalent in every classroom with proper label on its content	3.84	0.760	Agree	High
11. I am aware that the school has a pre-identified space for putting up Temporary Learning Spaces (TLS)	3.96	0.732	Agree	High
12. I am aware that the school has ready resumption strategies and alternative delivery modes	4.17	0.727	Agree	High
13. I am aware that the the school a has psychosocial interventions for personnel and learners...	3.91	0.752	Agree	High
14. I am aware that the school has trained teaching and non-teaching personnel who could provide psychosocial support to learners	4.00	0.913	Agree	High
15. I am aware that the school has an evacuation plan/route and procedures (to at least 3 hazards)	4.14	0.713	Agree	High
16. I am aware that the school has conducted awareness and capacity building for families	4.00	0.793	Agree	High
17. I am aware that the school participated in the different DRRM, CCAM and Peacebuilding activities of the LGU	4.06	0.581	Agree	High
18. I am aware that the school has designated DRRM focal to represent in Local Disaster Risk Reduction and Management Committee...	4.00	0.793	Agree	High
Overall Weighted Mean	4.06	0.581	Agree	High

Legend: 1.00-1.49-Strongly Disagree/Very Low; 1.50-2.49-Disagree/Low; 2.50-3.49-Uncertain/Average; 3.50-4.00-Agree/High; 4.50-5.00-Strongly Agree/Very High

Item 2 “100% of learners and their families have accomplished the Family Preparedness Plan” got the lowest weighted mean of 3.74 or “Agree” which means a “High” level of awareness of the family preparedness plan for all learners and their families. This means that teachers are informed of the DepEd Order No. 27, s. 2015 which promotes family earthquake preparedness that should be accomplished by all learners and their families. Teachers in the East District are aware in the accomplishment of family preparedness plan, because teacher-advisers may have discussed it with the parents during PTA meeting. However, despite being aware, this item obtained the lowest weighted mean, since not all parents accomplish the required plan, leading teachers to create doubts in full compliance.

An average weighted mean of 4.06 or “Agree” means that teachers demonstrate “High” level of awareness on School Disaster Risk Management. This indicates that they are aware of the contingency plans, family preparedness plans, learner tracking systems, resumption strategies, emergency protocols, and accessibility of first aid kits and go-bags.

The result implies that in the East District, teachers are aware of the plans, systems, strategies, protocols, and the equipment provided by the school for Disaster Risk Reduction and Management implementation. Their awareness serves as their guide in ensuring a proactive execution of the DRRM practices in their classroom and the entire school community.

Thus, along teachers’ involvement in School Disaster Risk Management, comes the learnings they gain which eventually adds up to their level of awareness. This finding supports the study of Mella et al., (2021) which conveyed that, teachers must participate in assessment stage which may include hazard mapping, planning stage which may include creation of work plan, and the implementation that capacitate them for the programs of School Disaster Risk Reduction and Management in schools in order to educate them on disaster awareness and preparedness.

Level of Awareness in Disaster Risk Reduction in Education

Table 4 presents the teachers’ level of awareness on Disaster Risk Reduction and Management in Education. The data reveal that all items from 1 to 6 were rated “Agree” which means a “High” level of awareness. Item 6 “the presence of a DRRM corner in every classroom, with updated IEC materials” obtained the highest weighted mean of 4.06 or “Agree” which means “High” level of awareness. It means that teachers are aware of the presence of DRRM corner in every classroom with updated Information, Education, and Communication (IEC) materials. Teachers in the East District are knowledgeable in the presence of DRRM corner, because it is one of the essential things that they need to put up inside their classroom.

Item 4 “School Head, teaching and non-teaching personnel have received at least 3 DRRM, CCAM and Peacebuilding trainings” obtained the lowest weighted mean of 3.83 or “Agree” which means a “High” level of awareness. This means that the participants are aware of the trainings regarding the DRRM, CCAM, and Peacebuilding for the School Head, teaching and non-teaching personnel. Teachers’ awareness on this item may be influenced by their participation in such trainings. Nevertheless, this obtained the lowest weighted mean because not all personnel may have received DRRM related trainings, causing them to have varied levels of awareness and exposure.

Table 4. Level of teachers’ awareness in School Disaster Risk Reduction and Management in terms of Disaster Risk Reduction in education

Indicators	Weighted Mean	SD	Verbal Description	Awareness Level
1. I am aware that the school has integrated key DRRM, CCAM and Peacebuilding concepts in at least 4 subject areas in all grade levels based on the Basic Education Curriculum Guide	3.87	0.747	Agree	High
2. I am aware that 100% of students are actively participating in various DRRM, CCAM and Peacebuilding activities	3.93	0.836	Agree	High
3. I am aware that the school has a DRRM, CCAM and Peacebuilding activities for school personnel	3.98	0.805	Agree	High
4. I am aware that the School Head, teaching and non-teaching personnel have received at least 3 DRRM, CCAM and Peacebuilding trainings from the Department of Education and other partners	3.83	0.780	Agree	High
5. I am aware of the availability of learning materials each of the DRRM, CCAM and Peacebuilding in the school library	3.92	0.795	Agree	High
6. I am aware of the presence of a DRRM corner in every classroom, with updated IEC materials	4.06	0.859	Agree	High
Overall Weighted Mean	3.93	0.706	Agree	High

Legend: 1.00-1.49-Strongly Disagree/Very Low; 1.50-2.49-Disagree/Low; 2.50-3.49-Uncertain/Average; 3.50-4.00-Agree/High; 4.50-5.00-Strongly Agree/Very High

An average weighted mean of 3.93 or “Agree” means that teachers demonstrate “High” level of awareness on Disaster Risk Reduction in Education. This indicates that they are aware of the integration of DRRM, CCAM, and Peacebuilding in Basic Education curriculum as well as the trainings that they are expected to receive for the purpose of capacity building.

The result indicates that the participants are aware that disaster risk reduction and management (DRRM), climate change adaptation and mitigation (CCAM), and peacebuilding are incorporated into educational systems by adapting curricula, conducting skills development programs, and implementing classroom-based information, education, and communication (IEC) activities.

This finding conforms to the study of Masocha et al. (2025) which emphasized the integration of DRR education in the school curriculum is imperative to realize disaster-resilient communities and protect lives.

Level of Teachers’ Practices in the implementation of Disaster Risk Reduction and Management

This section presents the findings in the level of practices of the teachers in the East District regarding Disaster Risk Reduction and Management in accordance with the Comprehensive School Safety indicators.

Level of Practices in Enabling Environment

Table 3.1 presents the teachers' level of practice in Enabling Environment in Disaster Risk Reduction and Management. The data reveal that all items from 1 to 6 were rated "Almost Always" which means "Very Satisfactory". Item 1 "adopted/adapted/localized policies relating to Disaster Risk Reduction and Management (DRRM) Climate Change Adaptation and Mitigation (CCAM) and Peacebuilding in education" obtained the highest weighted mean of 4.07 or "Almost Always" which means "Very Satisfactory". It means that participants actively put into practice tailored policies focused on Disaster Risk Reduction and Management (DRRM), Climate Change Adaptation and Mitigation (CCAM), and Peacebuilding within educational settings. They get to know the school's policies because teachers' may be involved in crafting and localizing such policies. Also, teachers are the implementers of such policies inside their classroom.

Item 3 "conduct/participate to the student-led school watching and hazard mapping Department of Education. (2015) obtained the lowest weighted mean of 3.85 or "Almost Always" which means a "Very Satisfactory" level of practice on Enabling Environment. This reveals that the participants conduct/participate in the student-led school watching and hazard mapping which is based on DO 23, s 2015. Teachers in the East District are aware due to the fact that they facilitate in conducting the student-led watching and hazard mapping. However, this item got the lowest weighted mean since some teachers were less involved in the conduct of student-led watching and hazard mapping compared to those teachers who are also the school's DRRM focal.

An average weighted mean of 3.95 or "Almost Always" means that teachers demonstrate a "Very Satisfactory" level of practice on Enabling Environment. This indicates that they adopted/adapted/localized policies relating to Disaster Risk Reduction in Education and Climate Change Adaptation and Mitigation, and Peacebuilding in education, conducted student-led watching and hazard mapping, and ensure Rapid Assessment of Damages Report (RADaR).

Table 5. Level of teachers' practices in School Disaster Risk Reduction and Management in terms of Enabling Environment

Indicators	Weighted Mean	SD	Verbal Description	Practice Level
1. I practice the adopted/adapted/localized policies relating to Disaster Risk Reduction and Management (DRRM) Climate Change Adaptation and Mitigation (CCAM) and Peacebuilding in education such as <i>Risk detection and communication</i> and <i>no single-use plastics inside school premises</i> .	4.07	0.663	Almost Always	Very Satisfactory
2. I collaborate with formed and functional School DRRM Team with the participation of the Supreme Student Government (SSG)/ Supreme Pupil Government (SPG) in the planning process, with school DRRM Coordinator ...	4.00	0.805	Almost Always	Very Satisfactory
3. I conduct/participate to the student-led school watching and hazard mapping (DO 23 s 2015), and involve students in DRRM planning	3.85	0.921	Almost Always	Very Satisfactory
4. I incorporate results of student-led school watching and hazard mapping in the School DRRM Plan and Annual Implementation Plan (AIP)	3.97	0.901	Almost Always	Very Satisfactory

5. I ensure Rapid Assessment of Damages Report (RADaR) is submitted to Central Office, within 72 hours after the onslaught of a hazard ...	3.93	0.858	Almost Always	Very Satisfactory
6. I had established partnerships that could be tapped to support its DRRM programs and activities, including those during and after a disaster	3.87	0.943	Almost Always	Very Satisfactory
Overall Weighted Mean	3.95	0.758	Almost Always	Very Satisfactory

Legend: 1.00-1.49-Not at all/Very Poor; 1.50-2.49-Rarely/Poor; 2.50-3.49-Sometimes/Satisfactory; 3.50-4.49-Almost Always/Very Satisfactory; 4.50-5.00-Always/Excellent

The result reveals that teachers practice the indicators in the Disaster Risk Reduction and Management implementation that contribute to having an enabling environment. They practice policies in line with Disaster Risk Reduction and Management and identify various hazards inside the school premises through conducting student-led watching and hazard mapping. Moreover, they practice reporting of damages after an occurrence of every hazard.

The assessment of damages is one that ensures a school environment that enables all members of the school community to learn and function productively. This finding poses the importance of the high level of practice that teachers in East District manifest in terms of creating an enabling environment. The result conforms to the study of Lebona (2020), an enabling environment allows productive learning, where all learners learn happily in a free, conducive and healthy environment.

Level of Practices in Safe Learning Facilities

Table 6 presents the teachers' level of practice on Safe Learning Facilities. The data reveal that all items were rated "Almost Always" which means "Very Satisfactory". Item 2 "clear with the roles and functions of the school in camp management" obtained the highest weighted mean of 3.96 or "Almost Always" which means "Very Satisfactory". It reveals that participants put into practice the Guidelines in Camp Coordination and Camp Management and Internally Displaced Persons and Protection and Children's Emergency Relief and Protection Act. Teachers are aware in camp management, because they may have a role in camp management that had pushed them to deepen their knowledge.

Item 1 "risk assessment of school facilities, in coordination with the division engineer" obtained the lowest weighted mean of 3.93 or "Almost Always" which means a "Very Satisfactory" level of practice on Disaster Risk Reduction in Education. This reveals that the participants take part in the risk assessment of school facilities, in coordination with the division engineer and other partner agencies and stakeholders. Teachers are aware of the conducted risk assessment of facilities, because School Heads may have included it in their faculty meeting as a form of feedbacking of results in the risk assessment. However, this obtained the lowest weighted mean, because risk assessments are typically coordinated at the administrative level, with limited direct involvement of some teachers.

Table 6. Level of teachers' practices in School Disaster Risk Reduction and Management in terms of Safe Learning Facilities

Indicators	Weighted Mean	SD	Verbal Description	Practice Level
1. I participate in the risk assessment of school facilities, in coordination with the division engineer and other partner agencies and stakeholders.	3.93	0.954	Almost Always	Very Satisfactory

<p>2. I am clear with the roles and functions of the school in camp management vis-à-vis the LGU and DSWD as per Joint Memorandum Circular No. 2, series of 2021 "Guidelines on Camp Coordination and Camp Management and Internally Displaced Persons and Protection" and RA 10821 "Children's Emergency Relief and Protection Act" and its corresponding IRR, if applicable.</p>	3.96	0.927	Almost Always	Very Satisfactory
Overall Weighted Mean	3.91	0.986	Almost Always	Very Satisfactory

Legend: 1.00-1.49-Not at all/Very Poor; 1.50-2.49-Rarely/Poor; 2.50-3.49-Sometimes/Satisfactory; 3.50-4.49-Almost Always/Very Satisfactory; 4.50-5.00-Always/Excellent

An average weighted mean of 3.91 or “Almost Always” means that teachers demonstrate a “Very Satisfactory” level of practice on Safe Learning Facilities. This indicates that they participate in the risk assessment of school facilities and they practice the roles and functions of camp management during emergencies.

The result reveals that the teachers assess potential risks in the school facilities, especially in their respective classroom, with the coordination of the division engineer and other partner agencies. Moreover, it reveals that teachers practice the roles and functions of the school in camp management whenever the school is used as temporary shelters during emergencies. Also, it includes reporting displaced learners and ensuring learning continuity.

The practices that teachers demonstrate in the implementation of Disaster Risk Reduction and Management in schools contribute to the safety of school facilities. The result supports the findings of Cresencio and Yabut (2023) that school buildings’ non-structural and infrastructural features must be free from risk and all their facilities have to be accessible to all people.

Level of Practices in School Disaster Risk Management

Table 7 presents the teachers’ level of practice on School Disaster Risk Management. The data reveal that all items were rated “Almost Always” which means “Very Satisfactory”. Item 5 “use available, accessible, and adequate first aid kits in the instructional and non-instructional” obtained the highest weighted mean of 4.09 or “Almost Always” which means “Very Satisfactory”. It reveals that participants use the available first aid kits in the instructional and non-instructional rooms in school. Teachers obtained a high level of practice in first aid kits, because Basic First Aid is one of the DRRM topics that is most commonly considered during teachers’ LAC sessions and they may have applied it in their classroom.

Table 7. Level of teachers’ practices in School Disaster Risk Reduction and Management in terms of School Disaster Risk Management

Indicators	Weighted Mean	SD	Verbal Description	Practice Level
1. I create/use a hazard-specific Contingency Plan,	3.92	0.983	Almost Always	Very Satisfactory
2. I use a learners family reunification plan that is clearly disseminated to students, teachers, and parents	3.86	0.957	Almost Always	Very Satisfactory

3. I use/establish a school personnel and learners tracking system/protocol in the event of a disaster	3.90	0.881	Almost Always	Very Satisfactory
4. I make/use Hazard and evacuation maps that are located in conspicuous places inside the school	4.02	0.991	Almost Always	Very Satisfactory
5. I use available, accessible, and adequate first aid kits in the instructional and non-instructional ...	4.09	0.898	Almost Always	Very Satisfactory
6. I use the essential and functional pieces of equipment in case of a disaster and/or emergency	4.02	0.805	Almost Always	Very Satisfactory
7. I conduct/participate in hazard-specific drills	4.03	0.799	Almost Always	Very Satisfactory
8. I use early warning system to inform students and personnel of hazards and emergencies	3.96	0.849	Almost Always	Very Satisfactory
9. I prepare go-bag in the classroom with proper label on its content	3.74	0.886	Almost Always	Very Satisfactory
10. I make use of the pre-identified space for putting up Temporary Learning Spaces (TLS) in	3.84	0.852	Almost Always	Very Satisfactory
11. I practice the resumption strategies and alternative delivery modes (ADMs) to ensure education continuity	4.04	0.816	Almost Always	Very Satisfactory
12. I participate in trainings that could equip me to provide psychosocial support to learners	3.98	0.850	Almost Always	Very Satisfactory
13. I put up an evacuation plan / route and procedures (to at least 3 hazards)	3.92	0.914	Almost Always	Very Satisfactory
14. I conduct/participate in awareness and capacity building for families (included during the Parents & Teachers Association Assembly) and learners	3.90	0.902	Almost Always	Very Satisfactory
15. I participate in the different DRRM, CCAM and Peacebuilding activities of the LGU	3.78	0.916	Almost Always	Very Satisfactory
Overall Weighted Mean	3.93	0.766	Almost Always	Very Satisfactory

Legend: 1.00-1.49-Not at all/Very Poor; 1.50-2.49-Rarely/Poor; 2.50-3.49-Sometimes/Satisfactory; 3.50-4.49-Almost Always/Very Satisfactory; 4.50-5.00-Always/Excellent

Item 9 “prepare go-bag in the classroom with proper label on its content” obtained the lowest weighted mean of 3.74 or “Almost Always” which means a “Very Satisfactory” level of practice on School Disaster Risk Management. This reveals that the participants prepare go-bag inside the classroom with proper label on its content. This suggests that although teachers prepare go-bags in the classroom, there may still be room for improvement in ensuring the completeness of contents.

An average weighted mean of 3.93 or “Almost Always” means that teachers demonstrate a “Very Satisfactory” level of practice on School Disaster Risk Management. This indicates that they execute what is reflected in their contingency plan and learners’ family reunification plan, use early warning systems, prepare go-bag, follow class resumption strategies, use evacuation maps, and put-up evacuation routes and procedures to conspicuous areas within school vicinity.

The result shows that schools not only develop contingency plans and family reunification strategies, but also implement these protocols through the use of early warning systems, the preparation of go-bags, clear class resumption strategies, and the prominent display of evacuation maps and routes within the school grounds.

This finding associates to the importance of the practices executed by teachers in School Disaster Risk Management which mainly aims to exercise proactive and resilient strategies in handling disaster-prone school communities. This finding reinforces the study of Trout et al. (2022), which gave emphasis that emergency preparedness and planning for schools serve to develop and maintain a culture of safety, equity, and inclusion that guards the school community from harm and supports the continuity of education by minimizing disruption.

Level of Practices in Disaster Risk Reduction and Management in Education

Table 8 presents the teachers’ level of practice on Disaster Risk Reduction in Education. The data reveal that all items were rated “Almost Always” which means “Very Satisfactory”. Item 1 “integrate key DRRM, CCAM and Peacebuilding concepts in at least 4 subject areas” obtained the highest weighted mean of 4.06 or “Almost Always” which means “Very Satisfactory”. It reveals that participants integrate key DRRM, CCAM, and Peacebuilding concepts to the curriculum. Teachers are able to relate lessons with localized experiences of hazards, making the concepts become relatable.

Table 8. Level of teachers’ practices in School Disaster Risk Reduction and Management in terms of Disaster Risk Reduction in education

Indicators	Weighted Mean	SD	Verbal Description	Practice Level
1. I integrate key DRRM, CCAM and Peacebuilding concepts in at least 4 subject areas in all grade levels based on the Basic Education Curriculum Guide	4.06	0.705	Almost Always	Very Satisfactory
2. I participate in DRRM, CCAM and Peacebuilding activities for school personnel	3.93	0.879	Almost Always	Very Satisfactory
3. I receive at least 3 DRRM, CCAM and Peacebuilding trainings from the Department of Education and other partners	3.66	0.925	Almost Always	Very Satisfactory
4. I put up a DRRM corner in the classroom, with updated IEC materials	3.79	0.982	Almost Always	Very Satisfactory
Overall Weighted Mean	3.86	0.766	Almost Always	Very Satisfactory

Legend: 1.00-1.49-Not at all/Very Poor; 1.50-2.49-Rarely/Poor; 2.50-3.49-Sometimes/Satisfactory; 3.50-4.49-Almost Always/Very Satisfactory; 4.50-5.00-Always/Excellent

Item 3 “at least 3 DRRM, CCAM and Peacebuilding trainings from the Department of Education” obtained the lowest weighted mean of 3.66 or “Almost Always” which means a “Very Satisfactory” level of practice on Disaster Risk Reduction in Education. This reveals that the participants receive at least 3 DRRM, CCAM, and Peacebuilding trainings from the Department of Education and other agencies. In the East District, teachers participate in trainings and seminars related to DRRM, however, they may have overlapping schedules which have affected their attendance.

An average weighted mean of 3.86 or “Almost Always” means that teachers demonstrate a “Very Satisfactory” level of practice on Disaster Risk Reduction in Education. This indicates that participants integrate DRRM, CCAM, and Peacebuilding concepts to the curriculum, participate in activities trainings related to DRRM, CCAM, and Peacebuilding. Lastly, they put up DRRM corner with available and updated IEC materials in the classroom.

The result shows that the participants practice a systemic integration of DRRM, CCAM, and Peacebuilding into educational frameworks through curriculum adaptation, capacity-building trainings, and classroom-based IEC initiatives. They put up DRRM corner in the classroom, they take part in activities conducted by the Department of Education or

supported by other partner agencies that capacitate them in Disaster Risk Reduction and Management.

This result supports the practices in Disaster Risk Reduction in Education that teachers execute along Disaster Risk Reduction and Management implementation. The result affirms to the study of Masocha et al. (2025) which highlighted that teacher training therefore provides professional development for educators on DRR topics so they can effectively teach and engage learners in this DRR integration in school curriculum.

Test of significant relationship in the level awareness and their practices on Disaster Risk Reduction and Management

This section presents the findings in the relationship between the level of awareness and level of practices of the teachers in the East District regarding Disaster Risk Reduction and Management in accordance with the Comprehensive School Safety indicators

The Spearman rho correlation analysis was employed to determine if there existed a significant relationship between the level of knowledge of the teachers about SDDRM and their corresponding practices along the areas of concern in school emergency management. It can be gleaned from the Table that the high level of knowledge on enabling environment had significant relationship with the practices in their roles in mobilizing the enabling environment of their respective schools ($\rho=.777$; $p=.000$) indicating a strong positive relationship which is significant at the .01 level. This indicates that the more knowledge on the enabling environment the teacher has, then she/he has the more tendencies to do the appropriate practices in order to ensure that specifications in school safety standards are pursued.

Table 9. Spearman Rho correlation between level of teachers' awareness and their practices in Disaster Risk Reduction and Management

		Practices in Enabling environment	Practices in Safe learning Facilities	Practices in School DRRM	Practices in DRRM in Education
Awareness in Enabling Environment	Correlation Coefficient	.777**	.708**	.718**	.656**
	p-value	.000	.000	.000	.000
	Decision on H ₀	Reject H ₀	Reject H ₀	Reject H ₀	Reject H ₀
	Interpretation	Significant	Significant	Significant	Significant
Awareness in Safe learning Facilities	Correlation Coefficient	.653**	.572**	.608**	.540**
	p-value	.000	.000	.000	.000
	Decision on H ₀	Reject H ₀	Reject H ₀	Reject H ₀	Reject H ₀
	Interpretation	Significant	Significant	Significant	Significant
Awareness in School Disaster Risk Management	Correlation Coefficient	.879**	.731**	.830**	.719**
	p-value	.000	.000	.000	.000
	Decision on H ₀	Reject H ₀	Reject H ₀	Reject H ₀	Reject H ₀
	Interpretation	Significant	Significant	Significant	Significant
Awareness in DRRM in Education	Correlation Coefficient	.836**	.740**	.792**	.767**
	p-value	.000	.000	.000	.000
	Decision on H ₀	Reject H ₀	Reject H ₀	Reject H ₀	Reject H ₀
	Interpretation	Significant	Significant	Significant	Significant

**significant @ $p < .01$

This manifests that teachers in the East District who are knowledgeable in tapping partners to support DRRM programs have high tendencies to create linkages in order to generate resources that would realize school DRRM activities. Moreover, teachers' level of knowledge in assessing risks and reporting of damages apply to their practices along the implementation of Disaster Risk Reduction and Management in school.

This level of knowledge has also significant relationship with practices along the use of safe learning facilities ($\rho=.708$; $p=.000$), School Disaster Risk Management ($\rho=.718$; $p=.000$) and DRR in Education ($\rho=.656$; $p=.000$). The very high p-values in all the areas of DRRM practices signify that there is evident advantage for schools where teachers have a high level of knowledge of the details of their enabling environment. With this knowledge, the teachers can realize their significant roles in maintaining school safety thereby enabling them to apply this knowledge to help the school and its constituents during an emergency.

The findings show that teachers who are well knowledgeable of the components of an enabling environment are just as likely to exhibit activities that are consistent with those components when implementing Disaster Risk Reduction and Management. For instance, teachers who have high level of awareness on the localized policies of the school would likely have a high level of practice in terms of imposing those policies in their classroom.

This finding asserts that teachers' high level of awareness on enabling environment for Disaster Risk Reduction and Management implementation associates to their high level of practice in enabling environment. This finding reinforces the study of Lavilles Jr. & Hordista (2023), which revealed that teachers and administrators who have a high knowledge about the different mechanisms for each disaster can integrate their awareness into the preparation and implementation of the DRRM program in the school.

The level of knowledge in terms of safe learning facilities also show high positive relationship with practices in enabling environment ($\rho=.653$; $p=.000$); safety learning facilities ($\rho=.572$; $p=.000$); DRRM in School ($\rho=.608$; $p=.000$); and DRRM in Education ($\rho=.540$; $p=.000$). This finding indicates that knowledge of the school's status in terms of safety learning facilities makes it highly possible for teachers to engage in the activities that relate to establishing and maintaining school safety specially those pertaining to the school's enabling environment, such as the conduct of risk assessment and hazard mapping with the coordination of the division engineer and other partner agencies. Teachers in the East District who are aware of the existing risks in their classroom tend to take actions that help manage those risks. Moreover, those teachers who have higher levels of knowledge in safe learning facilities have the tendencies to be more participative in any activity relating to school DRRM such as simulations of hazard-specific drills. Their knowledge of safe learning facilities will enable them to integrate DRRM education in their classrooms. For instance, teachers make it a point to emphasize children's rights before, during, and after a disaster. This indicates the teachers' expertise of camp management, which falls under the domain of safe learning environments—an important feature that students must learn in the classroom.

The high level of knowledge in School Disaster Risk Management also has a very significant relationship with practices along enabling environment ($\rho=.879$; $p=.000$); safety learning facilities ($\rho=.731$; $p=.000$); School Disaster Risk Management ($\rho=.830$; $p=.000$); and DRRM in Education ($\rho=.719$; $p=.000$). This high and positive relationship implies that the teachers who have high levels of knowledge on SDDRM are more frequently involved in the DRRM activities of the school than their counterparts who are less knowledgeable about SDDRM. As they realize their roles in establishing and maintaining school safety, they practice appropriate actions especially those that are adhering to standards set by issuances from concerned authorized government agencies. Teachers' knowledge of the guidelines on class cancellations or suspensions during natural disasters and other calamities lead them to

take appropriate actions in declaring class suspension in their classroom. A high level of awareness of these guidelines promotes appropriate and timely actions in accordance with official declarations.

This finding asserts that the adherence of teachers in the policies and issuances correlates to the level of knowledge they gained regarding such policies. This finding reinforces the study of Dela Cruz & Ormilla (2022) which suggests that the implementation of DRRM is directly and significantly associated with the level of awareness and understanding of the involved personnel.

Finally, the high level of knowledge along DRRM in Education shows high and positive relationship with practices along enabling environment ($\rho=.836$; $p=.000$); safety learning facilities ($\rho=.740$; $p=.000$); DRM in school ($\rho=.792$; $p=.000$); and DRRM in education ($\rho=.767$; $p=.000$). This result indicates that higher levels of knowledge in DRRM in education is associated with active participation in DRRM activities. The knowledge in DRRM in education earned through attendance to trainings paves the way for the teachers to understand the precepts of DRRM thereby enabling them to integrate these same concepts about the school's enabling environment, safety learning facilities and other related concepts about disaster reduction and management. By this education about DRRM and their active participation in these activities, they also are able to inculcate safety practices among their learners. Teachers in the East District who are knowledgeable about Standard Operating Procedures in fire drill tend to teach learners the proper execution of such drill.

This highlights the importance of equipping teachers with wide-ranging knowledge and skills in DRRM, as their active immersion directly pays to fostering a culture of preparedness within the school. When teachers realize their roles and functions in DRR, they are better positioned to carry out safety practices and direct students in responding effectively during disasters. This finding reinforces that study of Jaffar et al., (2024) which emphasized that teachers' capacity and duty in Disaster Risk Reduction (DRR) are crucial for student safety and community understanding.

Their participation in trainings contributes significantly to their ability to implement activities outlined in their School Disaster Risk Reduction and Management (DRRM) action plan. These trainings enhance their knowledge on student-led watching and hazard mapping, which they can pass on to learners in the classroom. Additionally, their understanding of the Standard Operating Procedures (SOPs) for hazard-specific drills equips them to effectively teach students the appropriate actions to take before, during, and after a disaster.

Challenges Encountered by the Teachers in Disaster Risk Reduction and Management

This section presents the findings in the challenges encountered by the teachers in the East District in Disaster Risk Reduction and Management implementation in accordance with the Comprehensive School Safety indicators.

Challenges Encountered in the Level of Awareness in terms of Enabling Environment

The data gained for the challenges encountered by the teachers in their level of awareness in terms of enabling environment reveals that they struggle due to lack of resources. This indicates that teachers have limited access to educational tools that help enrich their knowledge regarding enabling environment such as immediate reporting of damages through the Rapid Assessment of Damages Report software. One of the participants wrote "One of the problems we face in our school is lack of resources and educational tools." The limited

access to educational tools may include the struggle to have a functional device that could access the RADaR application.

In addition, providing appropriate equipment is essential to help them become more familiar with carrying out DRRM activities and operating necessary tools effectively. The finding supports to the study of Escobar (2021) which suggests that teachers should be given more opportunities to increase or enhance their awareness and understanding of the Disaster Risk Reduction and Management Plan in their respective schools.

Challenges Encountered in the Level of Awareness in terms of Safe Learning Facilities

The data gathered regarding the challenges faced by teachers in relation to their level of awareness on safe learning facilities indicates a lack of resources and infrastructure. Teachers in the East District report having limited access to materials and equipment necessary to raise their level of awareness on safe learning facilities. This issue primarily stems from insufficient funding, which hinders the school's ability to allocate adequate budget for the activities and equipment that enable them to increase their knowledge. As stated by one participant, *“Our knowledge is based on the available facilities we have in school...”*, this implies that they only get acquainted with what is evident in their school. For instance, teachers’ awareness of the accessibility of physical facilities—especially those that accommodate persons with disabilities—can be improved if appropriate equipment or activities are made available to them. This finding supports the study of Akbarovna (2022) which emphasized that physical conditions in the school play a big role in inclusive education.

Moreover, as frontliners during disasters, teachers must be familiar with DRRM-related equipment and facilities to ensure they can operate or manage them effectively, especially in times of crisis. This result conforms to the study of Dimaculangan (2021) which highlighted that DRRM needs to be understood more by the teachers for them to execute it well and even on how teachers would address different calamities and hazards that may happen in school and community.

Challenges Encountered in the Level of Awareness in terms of School Disaster Risk Management

The data for the challenges encountered by the teachers in their level of awareness regarding the School Disaster Risk Management reveals that they lack resources which stems to the teachers decreased motivation to learn. This means that they struggle to enrich their knowledge on School Disaster Risk Management due to the fact that they have poor quality of materials that do not meet their needs. One of the responses said that *“Lack of learning resources causes teachers decreased motivation to learn.”* Teachers in the East District seek to learn the standard operating procedures in conducting hazard-specific drills, however the absence of proper equipment hinders them to be knowledgeable on how to manipulate such equipment.

This finding suggests that the needs of the teachers to be provided with adequate equipment for them to effectively carry out activities that capacitate them especially in school disaster risk and management. The provision of resources for teachers to acquire DRRM related concepts contributes opportunities that enable the teachers in the East District to be more knowledgeable. This result aligns to the study of Magcamit (2024), which revealed that recommendations to enhance disaster risk reduction measures include

prioritizing targeted awareness programs for teachers, focusing on capacity building initiatives, and ensuring comprehensive professional development.

Challenges Encountered in the Level of Awareness in terms of DRR in Education

The data gathered from the teachers regarding their challenges encountered in the level of awareness in terms of Disaster Risk Reduction in Education show that they lack resources and materials. It can be gleaned from the data gathered that they experience shortage of DRRM materials that could help suffice their needs in terms of increasing their awareness. Trainings could have been very useful for them to capacitate in order to function well in the event of disasters. However, a participant stated that they encounter “*Limited resources, competing priorities, and limited teacher training.*” This conveys a pressing concern for the teachers’ awareness on particular concepts related to SDRRM. Teachers who seek to learn how to handle psychosocial interventions in their classroom, need to be well-versed on the concepts that respond to the needs of the learners relevant to their psychosocial well-being.

Similarly, when teachers in the East District are given opportunities to attend training programs, they are more likely to take proactive initiatives in preparing for potential disasters. This finding supports to the study of Dollentas & Gamba (2025) which emphasized that people trained are in a better position to protect themselves and other people during emergencies.

Challenges Encountered in the Level of Practices in terms of Enabling Environment

Respondents highlighted the need for adequate infrastructure, resources, and supplies to support DRRM efforts, including emergency shelters, first aid kits, communication systems, and evacuation plans.

The findings show that resource and motivation and teacher engagement are a challenge to teachers in the East District in their practices for enabling environment. This implies that teachers' actions in an enabling environment are directly influenced by low motivation factors, which may impede program and plan execution. In fact, there was even a statement that says "Decreased motivation resulting from teachers’ burnout" which may stem to a long-term vulnerability if it will not be receiving adequate attention despite its importance. Factors of teachers’ low motivation may include lack of materials they can handle in operating DRRM activities.

This finding reflects the importance of considering DRR in the prioritization of funds for school operations. It would influence the way teachers could execute Disaster Risk Reduction plans for the aim of creating an enabling environment. This finding reinforces the study of Cvetkovic et al., (2024) which suggests that allocating sufficient budgetary resources for modern equipment, materials, and educational programs underscores the commitment to prioritizing DRR within the educational framework.

Challenges Encountered in the Level of Practices in terms of Safe Learning Facilities

The data show that collaboration and engagement is the most frequently cited concern in the practices of teachers in terms of safe learning facilities in the implementation of Disaster Risk Reduction and Management. This highlights the need for stronger partnerships among teachers, stakeholders, and external partners, particularly in disaster preparedness and risk reduction activities. The lack of unified and active stakeholder involvement may hinder the comprehensive planning, construction, and maintenance of disaster-resilient school facilities. A participant wrote that there is “*Lack of interest of the teachers in the school*”

which potentially affects their engagement. This underscores the need to collaborate in carrying out roles and functions of the school in camp management.

Collaboration and engagement among teachers lays a strong foundation of a school in carrying out activities that are central to an effective management of temporary shelters in times of crises. The findings confirms the study of Atillo et al., (2025) which says that effective crisis management is characterized by strong collaboration among school leaders, teachers, and local authorities.

Challenges Encountered in the Level of Awareness in terms of School Disaster Risk Management

The data gathered from the teachers regarding their challenges in terms of their practices in School Disaster Risk Management reveals that the most stated challenge is the lack of funding and resources. Teachers' practices tend to be hindered by their lack of budget allocation for the activities and equipment that would contribute to their school's Disaster Risk Management. In fact, it was mentioned by one participant that there is "Lack of funding because the school depends only on the MOOE." This includes the limitations in having sufficient fund for the provision of DRRM equipment such as go-bags, early warning devices, fire extinguishers, first aid kits, and even putting up Temporary Learning Spaces (TLS).

Conforming to the problem faced by the teachers in carrying out School Disaster Risk Management, a part of their practices would really depend on the accessible equipment and facilities in school. Due to this, their challenges would influence their practices. This finding confirms the study of Cubillas et al., (2022) which emphasized, one pressing problem for most of schools is the availability of the equipment that will be used during the disaster.

Challenges Encountered in the Level of Practices in terms of DRR in Education

The data gathered regarding the teachers' practices in terms of DRR in Education reveals that there is a recurring concern on DRRM awareness and training. This poses a challenge since teachers lack trainings which help elevate their knowledge in Disaster Risk Reduction. Additionally, there were some who responded that there is "*Lack of seriousness in participating DRRM activities*" which influences their level of knowledge and directly impacts their practices. Moreover, their limited access to trainings also impacts their integration of DRR in the curricula, causing them to incorporate lesser DRRM related concepts across subject areas. Teachers who perceive first aid as outside their concern or interest often take related trainings less seriously, which causes minimal knowledge shared to their learners.

Limited access to trainings has an impact on their integration of DRR into curricula, causing them to integrate less DRRM-related concepts across subject areas. Additionally, lack of understanding may limit their capacity to confidently carry out disaster-related activities in the classroom. This finding reinforces the study of Cvetkovic et al., (2024), which revealed that teachers with lower levels of education (on DRRM) may have less experience and training in this area, which could result in greater concern about potential risks for students.

Proposed Enhancement of School Disaster Risk Reduction and Management Plan Enhanced DRRM Plan

This is an enhancement of Disaster Risk Reduction and Management Plan based on the awareness, practices, and challenges encountered by the teachers of the schools in the East District of Bayugan City Division.

Table 10. Enabling Environment

Findings	Programs/ Projects/Activities	Objectives	Target Output	Time Frame	Persons Responsible	Resources Needed (Materials/Fi nancial)
High level of awareness and practices but lack resources	Adopt/Adapt/localize at least 3 existing policies relating to DRRM, CCAM, and Peacebuilding in education	Ensure safe, resilient, and inclusive learning environment	Adopt/ Adapt/ localize policies from the LGU/ BLGU	Whole Year	School Head, DRRM coordinator, Teachers, Learners	Copies of existing policy, budget for printing
	Formation of functional school DRRM Team	Facilitate coordinated efforts among school stakeholders	Functional DRRM Team with clear roles and functions	First Quarter	DRRM Coordinator, School Head	
	Conduct student-led school watching and Hazard mapping	Increase awareness and student participation in identifying risks	Hazard maps and school safety report	At the end of the SY	Teachers, Learners, DRRM Coordinator	Manila paper, markers, legend symbols, training guide
	Rapid Assessment of Damages Report (RADaR)	Enable fast and accurate reporting post-disaster	Timely RADaR submissions	As needed (post-disaster)	DRRM Coordinator, Teachers	RADaR forms, mobile/data allowance
	Establish partnerships for DRRM support	Strengthen external support for DRRM initiatives	MOUs or agreements with LGUs, NGOs, and private orgs	Second Quarter	School Head, DRRM Coordinator	Documen- tation

Table 11. Safe Learning Facilities

Findings	Programs/ Projects/ Activities	Objectives	Target Output	Time Frame	Persons Responsible	Resources Needed (Materials/Financial)
High level of awareness and practices but lack resources	Ensure school building/classroom components meet DepEd and NBC standards	Promote safe physical environments	Inspection report and compliance status	First Quarter	School Head, Engineer, DRRM Coordinator	Technical tools, engineer consulta- tion fee
	Conduct risk assessment of school facilities	Identify hazard and address vulnerabilities	Risk assess- ment report	First Quarter	School Head, Division Engineer	Risk checklist, report templates
	Camp Coordina- tion and Camp Management orientation	Prepare for school use as evacuation site	Camp management plan and trained staff	Second Quarter	School Head, LGU, Teachers	Orientation materials, printing budget

Table 12. School Disaster Risk Management

Findings	Programs/ Projects/Activities	Objectives	Target Output	Time Frame	Persons Responsible	Resources Needed (Materials/Financial)
High level of awareness and practices but lack collaboration	Craft hazard-specific contingency plans	Ensure readiness for specific hazards	Approved contingency plans	Second Quarter	DRRM Team, School Head	Planning tools, hazard profile data
	Learners' family reunification plan	Ensure student safety during disasters	Family reunification protocol	First Quarter	Guidance Counselor, Teachers	Forms, contact info sheets
	Personnel and learners tracking system	Monitor whereabouts post-disaster	Functional tracking system	Second Quarter	ICT Coordinator, School Head	Logbooks, mobile/data resources
	Hazard and evacuation maps	Promote preparedness and safety	Posted maps in conspicuous areas of the school	First Quarter	DRRM Coordinator, School Head	Printed maps, laminating materials/Tarpaulin
	First aid kits in every room	Provide basic emergency care	Fully stocked kits	Whole Year	School Head, DRRM Coordinator, Teachers	First aid supplies, storage boxes
	Conduct drills for 3 hazards (Announced and Unannounced)	Improve response skill and preparedness of learners, all school personnel	At least 3 documented drills with stakeholders	Each Quarter	DRRM Team, Teachers, Learners	First Aid Supply, early warning device, Go-bags, sound system/megaphone
	Early warning system	Provide timely alerts such as fire alarm bell	Operational early warning devices	Second Quarter	School Head, DRRM Coordinator	Bells, megaphones, signage
	Go-bags in classrooms	Ensure emergency readiness	Labeled go-bags in all rooms	First Quarter	Teachers, DRRM Coordinator, Learners	Bags, basic supplies (whistle, flashlight)
	Identify space for TLS	Provide continuity of learning post-disaster	Identified and documented TLS area	First Quarter	School Head, DRRM coordinator	Space markers, coordination with LGU
	Psychosocial interventions	Address trauma and emotional needs	Sessions conducted for staff and learners	Post-disaster	Guidance Counselor, Teachers	Counseling materials, venue
Awareness & capacity building during PTA	Engage families in DRRM	DRRM sessions conducted during PTA meetings	Every PTA Meeting	School Head, DRRM coordinator, PTA Officers	IEC materials, sound system	

Table 13. DRRM in Education

Findings	Programs/ Projects/Activities	Objectives	Target Output	Time Frame	Persons Responsible	Resources Needed (Materials/Financial)
High level of awareness and practices but lack resources	Integrate DRRM, CCAM, and Peacebuilding in at least 4 subjects	Strengthen learners' knowledge and skills on DRRM	Lesson guides, teaching logs	Whole Year	Subject Teachers, School Head	Curriculum guides, training modules, IEC materials
	Conduct DRRM, CCAM, Peacebuilding activities for staff	Build capacity of school personnel	Conducted trainings and workshops	Quarterly	DRRM Coordinator, School Head, Teachers	Honoraria, training materials, budget for venue and/or other provisions if needed
	DRRM corner in every classroom	Provide visible, DepEd-approved, and updated information	DRRM corners with IECs and emergency info	First Quarter	Teachers	Bulletin boards, printed IECs

CONCLUSION

Based on the findings, the following conclusions are drawn;

1. The level of teachers' awareness lays a strong foundation on the potential action to be executed along Disaster Risk Reduction and Management implementation considering the four indicators of the Comprehensive School Safety. The findings in the level of awareness aligns with the Threat Appraisal from Protection Motivation Theory, which relates to the awareness that teachers acquire in assessing risks and identifying hazards.
2. The teachers' awareness translates into actions given the right equipment and resources, contributing to the effective implementation of School Disaster Risk Reduction and Management. Their level of practice associates to the Coping Appraisal from the Protection Motivation Theory, which relates their capacity to carry out DRRM related practices such as managing risks and performing hazard-specific drills.
3. Being knowledgeable on Disaster Risk Reduction and Management increases one's tendencies in carrying out activities, mechanisms, and protocols relevant to the overall implementation of the DRRM program in school.
4. Despite high levels of awareness and practices, teachers encounter common challenges relevant to the Comprehensive School Safety indicators. Those challenges serve as barriers in promoting a school environment that is safe and resilient.
5. Grounded in the findings of this study, a proposed enhancement on SDRRM plan addresses the gaps and reinforces the challenges that teachers in encounter in the implementation.

Recommendations

Based on the conclusions drawn, the following are the recommendations;

1. The teachers should engage in trainings, seminars, and professional development that would sustain and/or enrich their awareness and capacity on Disaster Risk Reduction and Management.
2. The schools should ensure provision of adequate resources in order to better support teachers' practices as they carry out planned activities.
3. The school DRRM focal should encourage participation in carrying out simulations in order to strengthen the connection between awareness and practices.

4. Resource management should be considered in the planning, especially in allocating funds and resources. Schools should tap partner agencies or other stakeholders that could support its implementation.
5. SDRRM plans should be crafted through the collective efforts and consolidated ideas from the School's DRRM team.
6. The future researchers may explore a broader scope by considering other districts or may include perspectives of learners, parents, and stakeholders.

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