

Best practices of selected schools in the division of Camarines Norte in their implementation of Comprehensive School Safety (CSS)

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Abstract

This study determined the best practices of four selected public secondary schools in the Division of Camarines Norte regarding their Comprehensive School Safety (CSS) implementation. Utilizing a mixed-methods descriptive-exploratory design, the research assessed school profiles, safety practices, challenges, and proposed enhancements. Findings revealed that while these four institutions have successfully established Disaster Risk Reduction and Management (DRRM) teams and integrated preparedness into annual plans, significant gaps persist. Specifically, compliance with safety standards for new infrastructure was strong, yet the retrofitting of aging buildings and routine maintenance remained critical deficiencies. Although emergency drills are regular, the schools lacked adequate health preparedness, psychosocial support, and updated DRRM learning resources. The study identified five distinct challenges limiting capability: inadequate evacuation facilities, poor health and environmental management, limited disaster resources, weak stakeholder coordination, and minimal community engagement. Despite these hurdles, the schools demonstrated resilience by embedding risk reduction in the curriculum and fostering enabling environments through partnerships. Conclusively, while the schools possess strong foundational disaster readiness, their effectiveness is constrained by infrastructure deficits. Consequently, the researcher developed a comprehensive Action Plan to address these vulnerabilities across the three pillars of CSS: safe learning facilities, school disaster management, and risk reduction education. This model prioritizes institutionalizing best practices, enhancing multi-sectoral collaboration, and securing funding for capacity building, ensuring a resilient environment that guarantees educational continuity for students in Camarines Norte.

Keywords: Best Practices, Implementation, Comprehensive School Safety

1. Introduction

Schools play a significant role in shaping the future of every nation. Beyond delivering academic instruction, they are expected to provide a safe, secure, and nurturing environment where children can learn and grow. However, educational institutions are increasingly exposed to a range of hazards, natural disasters such as earthquakes and typhoons, human-induced crises like armed conflict and violence, and health-related emergencies including disease outbreaks. These risks pose serious threats to students' safety and the continuity of learning. In response, global and national efforts have been made to safeguard school communities, most notably through the adoption of the Comprehensive School Safety Framework (CSSF) 2022–2030. Developed by the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (GADRRRES) in

collaboration with agencies like UNESCO and UNICEF, this framework provides an all-hazards, all-risks approach to resilience. It is built on three key pillars: safe learning facilities, school safety and educational continuity management, and risk reduction and resilience education. Globally, the CSSF has been embraced as a practical roadmap to help educational institutions prepare for, respond to, and recover from hazards while ensuring the delivery of quality education.

In the Philippines, the commitment to school safety is reinforced by Republic Act No. 10121, also known as the Philippine Disaster Risk Reduction and Management Act of 2010, which mandates the integration of DRRM principles into school operations. To institutionalize this, the Department of Education issued DepEd Order No. 37, s. 2015 (Comprehensive Disaster Risk Reduction and Management in Basic Education Framework). This order aligns with earlier initiatives, such as DepEd Order No. 55, s. 2007, which prioritized mainstreaming DRRM through structural and non-structural measures, and DepEd Memorandum No. 175, s. 2007, which established a Technical Working Group to develop resources for DRRM implementation. Furthermore, the Child Protection Policy (DepEd Order No. 40, s. 2012) and the Brigada Eskwela Program emphasize the importance of creating safe, conducive, and inclusive learning spaces for all learners.

Despite these comprehensive legal and policy measures, challenges in the actual implementation of CSS persist. Schools often struggle with inadequate resources, limited training for personnel, insufficient stakeholder involvement, and weak monitoring systems. In many cases, school safety programs remain reactive rather than proactive, often implemented only after a crisis has occurred. While some schools have developed promising strategies, there remains a lack of documentation and dissemination of these best practices to guide other institutions (Green et al., 2020). Katangolo-Nakashwa and Mfidi (2025) further identified major barriers, including insufficient personnel, limited learner awareness, inadequate teacher well-being, and poor inter-sectoral coordination.

The urgency of this issue is highlighted by the country's vulnerability. According to the World Bank (2023), the Philippines is one of the most disaster-prone countries in the world, with approximately 78% of public schools and 96% of students exposed to multiple hazards. Between 2021 and 2023 alone, around 4,000 schools were damaged by various disasters, disrupting the education of two million children. These statistics underscore that while national guidelines exist, the practical implementation of the CSSF faces hurdles, such as limited resources and coordination issues, that hinder effective disaster risk reduction.

The problem remains largely unresolved due to the lack of localized and context-based approaches to school safety. Not all schools are equally equipped to carry out CSS initiatives, and there is insufficient research focusing on what works at the school level, particularly regarding successful models that others can adapt. In light of this, the current study seeks to identify and analyze the best practices of selected public schools in their implementation of Comprehensive School Safety (CSS). By documenting these practices, the study aims to offer practical, scalable solutions that can support school leaders, policymakers, and stakeholders in strengthening safety programs. Ultimately, the research findings intend to contribute to the development of more effective, context-sensitive CSS strategies that foster a safer, more resilient learning environment for Filipino learners.

1.1. Objective of the Study

This study aimed to determine the best practices and challenges of selected public schools in the Division of Camarines Norte regarding Comprehensive School Safety (CSS) implementation. Specifically, it evaluated the schools' profiles across enabling environments, safe facilities, educational continuity, and risk reduction education to propose actionable recommendations for strengthening institutional disaster resilience.

2. Methodology

This study utilized a mixed-methods descriptive-exploratory design to comprehensively assess Comprehensive School Safety (CSS) implementation, an approach particularly effective for investigating complex phenomena and uncovering patterns that inform policy (William, n.d.). By integrating quantitative and qualitative methods, the researcher employed structured survey questionnaires to evaluate school profiles and challenges across the four CSS pillars, enabling mechanisms, safer learning facilities, educational continuity, and resilience education, while simultaneously conducting Focus Group Discussions (FGD) with school heads, DRRM coordinators, and teachers to explore best practices and contextual experiences. Validated by document analysis, this dual approach allowed for both the measurement of implementation levels and a deeper understanding of the operational successes and difficulties within the selected schools (William, n.d.).

2.1. Population, Sample Size, and Sampling Technique

This study employed total enumeration to involve 56 key informants, comprising 4 school heads, 4 DRRM coordinators, and 48 teacher-members of the School-DRRM Team from Basud National High School, Camarines Norte National High School, D.Q. Liwag National High School, and Vinzons Pilot High School. These institutions were purposively selected due to their active engagement in the Comprehensive School Safety (CSS) framework, ensuring that the respondents possessed direct experience in planning, implementing, and evaluating safety measures.

2.2. Data Gathering Procedures

Upon securing administrative approval from the Schools Division Superintendent and School Heads, the researcher obtained informed consent from all respondents to ensure ethical compliance and confidentiality. Data collection utilized a survey checklist adopted from the standard DepEd Comprehensive School Safety (CSS) Tool to assess school profiles, best practices, and challenges across the four pillars, enabling environments, facilities, educational continuity, and risk reduction education, supplemented by document analysis and Focus Group Discussions (FGD). The resulting quantitative data were analyzed using frequency counts and weighted means, while qualitative insights were processed through thematic analysis to identify recurring implementation patterns.

2.3. Statistical Treatment of Data

The data were analyzed using frequency counts to describe the profiles of the selected public secondary schools regarding CSS implementation, while percentages were utilized to quantify the specific challenges encountered by these institutions.

3. Results and Discussion

3.1. Profile of selected public secondary schools in the implementation of the Comprehensive School Safety Monitoring Tool

Based on the DepEd Memorandum No. 133, s. 2019 – Comprehensive School Safety Monitoring Tool, the selected public secondary schools in Camarines Norte demonstrated a highly effective Enabling Environment, with most indicators showing 100% implementation (Table 1). The schools have successfully institutionalized safety measures by designating School DRRM Coordinators and Focal Persons in adherence to DepEd Order No. 21, s. 2015, securing regular budget allocations, and integrating disaster resilience into

School Improvement Plans. While participatory planning and student-led hazard mapping concepts (DO 23 s 2015) were largely incorporated into school plans, significant gaps remain in documentation and specific structural organization. Notably, School C lacked a fully defined DRRM team, and all schools reported a 0% completion rate for DRR-related questions in the EMIS/EBEIS system. Therefore, while the schools have established strong governance and multi-sectoral partnerships, the sustainability of the CSS framework requires urgent improvements in data management and the formalization of internal response teams.

Table 1. Profile of the School in the Implementation of CSS along Enabling Environment

Indicators	School A % of Implementation	School B % of Implementation	School C % of Implementation	School D % of Implementation
1. A School DRRM Coordinator is designated.	100	100	100	100
2. The School Disaster Risk Reduction and Management (DRRM) Committee is functional.	100	100	100	100
3. Adopted/Adapted/localized existing policies relating to DRRM in education/school safety	100	100	100	100
4. Designated School DRRM Focal Person	100	100	100	100
5. Formed School DRRM Team, consisting of personnel from different offices; with defined membership and roles and responsibilities/functions	100	100	0	100
6. Has a comprehensive School DRRM Plan, which includes CCA and EiE measures, covering risk assessment, risk reduction, and rehabilitation and recovery	100	100	100	100
7. Students participated in the planning process	100	100	100	100
8. Integrated DRRM into the School Improvement Plan (SIP)	100	100	100	100
9. 100% completion of DRR related questions in the EMIS/EBEIS	0	0	0	0
10. Regular DRRM activities are supported by school budget	100	100	100	100
11. Funding sources for interventions in the aftermath of a disaster or emergency exist and can easily be tapped.	100	100	100	100
12. School has partnerships that could be tapped to support its DRRM programs and activities, including those after a disaster	100	100	100	100
13. Conducted student-led school watching and hazard mapping (DO 23 s 2015)	0	0	0	0
14. Incorporated results of student-led school watching and hazard mapping in the School DRRM Plan and SIP	100	100	100	100
15. Linked student-led school watching and hazard mapping with the community hazard maps of LGUs provided by DOST	100	100	100	100
16. School Planning Team have linked the community hazard maps with education data to better understand the school's risk	100	100	100	100
17. School submitted Rapid Assessment of Damage Report (RADAR) to the DRRMS Central Office, within 72 hours after the onslaught of a hazard in the area	100	100	100	100
18. Data collection and consolidation of programs and activities on DRRM, covering the 3 Pillars, to monitor results and impact exist	100	100	100	100

100%-Full Implementation 0%-Not Implemented

The selected schools in Camarines Norte achieved a 100% implementation rate for the Safe Learning Facilities component of the CSS framework, reflecting a mature integration of infrastructure safety and strict adherence to DepEd Order No. 37, s. 2015. All four institutions successfully conducted facility inventories and risk assessments in compliance with DepEd Order No. 33, s. 2021, supported by quarterly inspection schedules and proactive budget allocations for routine maintenance. Furthermore, school heads demonstrated high readiness for community-based disaster management by identifying facilities as temporary evacuation centers according to Joint Memorandum Circular No. 1, s. 2013 and Republic Act No. 10821. Despite this universal compliance, qualitative findings suggest that sustained resilience is occasionally threatened by Maintenance and Other Operating Expenses (MOOE) limitations, aligning with Navarro (2022), who noted that financial constraints often hinder large-scale structural retrofitting in Philippine schools. Consequently, while these schools serve as regional models for proactive facility management, strengthening financial partnerships with Local Government Units is recommended to maintain these high safety standards.

Table 2. Profile of the School in the Implementation of CSS along Safe Learning Facilities

Indicators	School A	School B	School C	School D
	% of Implementation	% of Implementation	% of Implementation	% of Implementation
1. School buildings that has been inventoried	100	100	100	100
2. School buildings with risk assessment	100	100	100	100
3. Unsafe school buildings identified	100	100	100	100
4. Systems for monitoring and quality assurance of school building construction exist	100	100	100	100
5. Financial resources are allocated for completion of needed action to address unsafe school buildings within a specified period	100	100	100	100
6. Number of unsafe school buildings with appropriate action undertaken by the School Head (e.g. upgraded, retrofitted, non-usage, etc.)	100	100	100	100
7. Conducted regular school inspection and maintenance of facilities conducted (state how often)	100	100	100	100
8. Undertaken regular repair of minor classroom (including facilities) damages	100	100	100	100
9. Roles and responsibilities for maintenance are defined, documented and assigned	100	100	100	100
10. School Heads have allotted budget for routine maintenance of school facilities for safety and to protect investments, with transparent monitoring oversight at the school level	100	100	100	100
11. School Heads have identified those schools that are expected to be used as temporary evacuation centers for disasters	100	100	100	100
12. School Heads are 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. 1, series of 2013 "Guidelines on Evacuation Center Coordination and Management" and RA 10821 "Children's Emergency Relief and Protection Act" and its corresponding IRR	100	100	100	100
13. Guidance and regulations on safe school site selection, resilient design, and resilient construction are followed	100	100	100	100

14. New school construction is monitored for compliance with safe school site selection, safe school design and safe school construction	100	100	100	100
<i>100%-Full Implementation 0%-Not Implemented</i>				

The selected schools in the Division of Camarines Norte demonstrated absolute compliance (100%) across all 22 indicators for School Safety and Educational Continuity Management, reflecting a thorough institutionalization of disaster preparedness and recovery systems (Table 3). In accordance with DepEd Order No. 37, s. 2015, these institutions have successfully operationalized contingency plans, secured essential emergency equipment, and identified temporary learning spaces and alternative delivery modes to guarantee educational continuity. High levels of readiness were further evidenced by functional early warning systems, regular hazard-specific drills involving stakeholders like the Bureau of Fire Protection, and the mandatory completion of Family Earthquake Preparedness Plans by students. Notably, the schools adopted a holistic resilience approach by integrating psychosocial support and psychological first aid training for personnel and learners. Despite these perfect quantitative results, field validations revealed contextual challenges, such as budgetary hurdles in replenishing medical supplies and upgrading aging emergency equipment, suggesting that while the schools currently serve as models of resilience, sustained implementation requires consistent financial oversight and enhanced private-sector partnerships.

Table 3. Profile of the School in the Implementation of CSS along School Safety and Educational Continuity Management

Indicators	School A	School B	School C	School D
	% of Implementation	% of Implementation	% of Implementation	% of Implementation
1. School has a Contingency Plan, i.e. Preparedness Plan turned into response actions when a disaster strikes	100	100	100	100
2. School has available, accessible, and adequate first aid kit in every instructional classroom	100	100	100	100
3. School has at least 2 necessary and functioning equipment, in case of a disaster (e.g. fire extinguisher, handheld/base radio, generator, etc.)	100	100	100	100
4. School has pre-identified spaces for putting up Temporary Learning spaces/Shelters in the aftermath of a disaster	100	100	100	100
5. School has ready resumption strategies and alternative delivery modes to ensure education continuity	100	100	100	100
6. School has ensured that students completed the Family Earthquake Preparedness Plan; and school has reported completion to DepEd DRRM at the Central Office	100	100	100	100
7. School has established a school personnel tracking system/protocol in the event of a disaster	100	100	100	100
8. School has trained personnel to administer first aid to students and personnel	100	100	100	100
9. School has psychosocial interventions for personnel and students	100	100	100	100
10. School has trained teachers and other personnel who could provide psychosocial support to students	100	100	100	100
11. School DRRM Plan and SIP with DRRM integration are reviewed annually	100	100	100	100

12. Conducted Brigada Eskwela to ensure school safety and preparedness measures are in place as per DO	100	100	100	100
13. Students, teachers, parents and other stakeholders participated in Brigada Eskwela	100	100	100	100
14. School has established functional early warning system to inform students and personnel of hazards and emergencies (protocol, warning signs, devices, IEC), considering national and LGU warning systems and protocols	100	100	100	100
15. School conducted regular hazard-specific drills (at least 3 hazards) with participation of stakeholders (BFP, Medic, LGUs, NGOs, community, PTA, alumni, and others)	100	100	100	100
16. Students participated in the drills	100	100	100	100
17. School has an evacuation plan and procedures	100	100	100	100
18. School has a student-family reunification plan that is clearly disseminated to students, teachers and parents	100	100	100	100
19. School Head has received DRRM training from division or region or partners	100	100	100	100
20. School DRRM Team has received DRRM training from division or region or partners (indicate how many)	100	100	100	100
21. School has conducted awareness and capacity building for families and learners	100	100	100	100
22. School participated in the different DRRM/CCA/EiE activities of the LGU	100	100	100	100

100% – Fully Implemented; 0% – Not Implemented

The selected schools in the Division of Camarines Norte achieved a 100% implementation rate for Risk Reduction and Resilience Education (RRRE), demonstrating a comprehensive institutional commitment to integrating Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) into both formal and informal curricula (Table 4). Following the National Curriculum Guide, all institutions systematically embedded DRR/CCA concepts across grade levels and subjects, assessing students through measurable learning outcomes and active participation in co-curricular activities such as hazard mapping and environmental campaigns. To sustain these initiatives, schools established thorough capacity-building plans for personnel and maintained updated Information, Education, and Communication (IEC) materials within dedicated classroom DRRM corners. These results indicate that the respondent schools have effectively institutionalized a proactive culture of readiness, utilizing creative and experiential learning to ensure that safety principles are not only taught but are operationalized by both learners and staff.

Table 4. Profile of the School in the Implementation of CSS along Risk Reduction and Resilience Education

Indicators	School A	School B	School C	School D
	% of Implementation	% of Implementation	% of Implementation	% of Implementation
1. School has integrated key DRR and CCA concepts in the curriculum based on the National Curriculum Guide	100	100	100	100
2. All grade levels and subjects integrate DRR and CCA concepts Skills and competencies of students are assessed through measurable learning and risk reduction (RR) outcomes	100	100	100	100
3. All students are required to actively participate in various DRRM/CCA/EiE activities	100	100	100	100

4.	School has a DRRM capacity building plan for teachers and school personnel	100	100	100	100
5.	School personnel were trained on DRRM and/or CCA	100	100	100	100
6.	School has available and accessible quality and up-to-date DRRM materials	100	100	100	100
7.	Presence of DRRM corner, with updated IEC materials posted in it, in every classroom	100	100	100	100
8.	School carries out monitoring and evaluation to assess sustainable implementation	100	100	100	100

100% – Fully Implemented; 0% – Not Implemented

3.2. Best Practices of the Selected Public Secondary Schools in the Implementation of CSS

The selected public secondary schools in the Division of Camarines Norte achieved a 100% implementation rate across all key indicators of the Enabling Environment pillar, reflecting a matured institutionalization of disaster resilience (Table 5). Best practices identified through Focus Group Discussions (FGD) include the formation of functional, inter-departmental DRRM teams, the systematic integration of risk reduction into the School Improvement Plan (SIP), and the active inclusion of students in the planning process to foster a proactive safety culture. These efforts demonstrate that schools have transitioned from mere policy compliance to operationalizing resilience as a core organizational value, bolstered by thorough partnerships with local government units and emergency response teams for resource sharing. Such localized successes effectively validate the institutionalization mandates of Republic Act 10121 and the National DRRM Plan (2011–2028), while aligning with research from the Philippine Institute for Development Studies (PIDS), which underscores the critical role of multi-sectoral collaboration and localized planning in achieving effective DRRM governance.

Table 5. Best Practices of the Selected Public Schools in the Implementation of CSS along Enabling Environment

Indicators	School A	School B	School C	School D
	% of Implementation	% of Implementation	% of Implementation	% of Implementation
1. School has a Contingency Plan, i.e. Preparedness Plan turned into response actions when a disaster strikes	100	100	100	100
2. Formed School DRRM Team, consisting of personnel from different offices; with defined membership and roles and responsibilities/functions	100	100	100	100
3. Has a comprehensive School DRRM Plan, which includes CCA and EiE measures, covering risk assessment, risk reduction, and rehabilitation and recovery	100	100	100	100
4. Students participated in the planning process	100	100	100	100
5. Integrated DRRM into the School Improvement Plan (SIP)	100	100	100	100
6. School has partnerships that could be tapped to support its DRRM programs and activities, including those after a disaster	100	100	100	100

100% – Fully Implemented; 0% – Not Implemented

The selected public secondary schools in Camarines Norte achieved a 100% implementation rate across all Safe Learning Facilities indicators, demonstrating a sophisticated institutional culture of preventive maintenance and hazard-resilient planning (Table 6). Best practices include the proactive allocation of funds to remediate unsafe buildings, consistent minor facility repairs, and transparent budgetary oversight by school

heads to protect educational investments. Furthermore, leadership demonstrated precise operational alignment with Joint Memorandum Circular No. 1, series of 2013 and Republic Act No. 10821 regarding school-based camp management and coordination with the DSWD and local government units. This administrative rigor ensures that new constructions adhere to national site selection and resilient design standards, thereby mitigating exposure to floods and seismic risks. Qualitative data from Focus Group Discussions confirmed that these efforts, ranging from routine roof maintenance to inter-agency collaboration, effectively transform schools into secure community havens. Ultimately, such strict adherence to the National Building Code and proactive resource management significantly reduces disaster-related losses while ensuring the uninterrupted delivery of education (UNESCO & UNICEF, 2017).

Table 6. Best Practices of the Selected Public Schools in the Implementation of CSS along Safe Learning Facilities

Indicators	School A	School B	School C	School D
	% of Implementation	% of Implementation	% of Implementation	% of Implementation
1. Financial resources are allocated for completion of needed action to address unsafe school buildings within a specified period	100	100	100	100
2. Undertaken regular repair of minor classroom (including facilities) damages	100	100	100	100
3. School Heads have allotted budget for routine maintenance of school facilities for safety and to protect investments, with transparent monitoring oversight at the school level	100	100	100	100
4. School Heads are 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. 1, series of 2013 "Guidelines on Evacuation Center Coordination and Management" and RA 10821 "Children's Emergency Relief and Protection Act" and its corresponding IRR	100	100	100	100
5. New school construction is monitored for compliance with safe school site selection, safe school design and safe school construction	100	100	100	100

100% – Fully Implemented; 0% – Not Implemented

The selected schools in Camarines Norte achieved a 100% implementation rate across all indicators for School Safety and Educational Continuity Management, reflecting a culture of readiness that extends beyond mere compliance (Table 7). Key best practices identified through Focus Group Discussions (FGD) include the operationalization of thorough contingency plans, the provision of accessible first-aid kits in every classroom, and the establishment of thorough resumption strategies, such as alternative delivery modes, to guarantee educational continuity during crises. Furthermore, the institutionalization of personnel tracking protocols and psychosocial interventions demonstrates a holistic commitment to the physical and mental recovery of the school community, aligning with the mandates of Republic Act No. 10121 and Republic Act No. 10821. By integrating community-based initiatives like Brigada Eskwela and collaborating with local government units on Climate Change Adaptation (CCA) and Education in Emergencies (EiE), these schools have successfully embedded disaster resilience into their core administrative and instructional operations.

Table 7. Best Practices of the Selected Public Schools in the Implementation of CSS along School Safety and Educational Continuity Management

Indicators	School A	School B	School C	School D
	% of	% of	% of	% of

	Implementation	Implementation	Implementation	Implementation
1. School has a Contingency Plan, i.e. Preparedness Plan turned into response actions when a disaster strikes	100	100	100	100
2. School has available, accessible, and adequate first aid kit in every instructional classroom	100	100	100	100
3. School has ready resumption strategies and alternative delivery modes to ensure education continuity	100	100	100	100
4. School has established a school personnel tracking system/protocol in the event of a disaster	100	100	100	100
5. School has trained personnel to administer first aid to students and personnel	100	100	100	100
6. School has psychosocial interventions for personnel and students	100	100	100	100
7. Conducted Brigada Eskwela to ensure school safety and preparedness measures are in place as per DO	100	100	100	100
8. Students participated in the drills	100	100	100	100
9. School participated in the different DRRM/CCA/EiE activities of the LGU	100	100	100	100

100% – Fully Implemented; 0% – Not Implemented

The selected public secondary schools achieved a 100% implementation rate across all Risk Reduction and Resilience Education (RRRE) indicators, a process that systematically builds disaster-related knowledge and skills (GADRRRES, 2023). As shown in Table 8, these institutions successfully integrated Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) concepts into all grade levels and subjects in accordance with the National Curriculum Guide, assessing student competencies through measurable risk reduction outcomes. Key best practices include the execution of comprehensive capacity-building plans for school personnel and the establishment of updated DRRM corners in every classroom featuring Information, Education, and Communication (IEC) materials. Qualitative feedback from Focus Group Discussions (FGD) indicated that this "whole-school approach" successfully shifted the institutional culture from mere compliance to active ownership, with visible learning aids and regular simulations significantly boosting the confidence of both students and staff. These results align with Parallag (2024), whose research confirms that structured DRR instruction improves emergency behavior and fosters proactive attitudes. By institutionalizing RRRE as a cornerstone of academic and community development, these schools cultivate a generation of learners equipped with the essential values for long-term resilience.

Table 8. Best Practices of the Selected Public Schools in the Implementation of CSS along Risk Reduction and Resilience Education

Indicators	School A % of Implementation	School B % of Implementation	School C % of Implementation	School D % of Implementation
1. School has integrated key DRR and CCA concepts in the curriculum based on the National Curriculum Guide	100	100	100	100
2. All grade levels and subjects integrate DRR and CCA concepts Skills and competencies of students are assessed through measurable learning and risk reduction (RR) outcomes	100	100	100	100
3. School has a DRRM capacity building plan for teachers and school personnel	100	100	100	100
4. School personnel were trained on DRRM and/or CCA	100	100	100	100

5. Presence of DRRM corner, with updated IEC materials posted in it, in every classroom	100	100	100	100
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100% – Fully Implemented; 0% – Not Implemented

3.3. Challenges Faced by Public Secondary Schools along Implementation of Comprehensive School Safety

Despite significant progress in CSS implementation, the four selected schools encountered critical operational and structural hurdles across five key domains. Data from Table 9 reveal that 50% of the institutions struggled with insufficient evacuation facilities, a lack of inclusive WASH infrastructure for physically impaired individuals, and inadequate emergency transportation. Furthermore, while schools maintained strong internal policies, external engagement remained a weakness, with 50% reporting difficulties in recruiting parent volunteers and a significant 75% noting low student participation in DRRM-related extracurricular activities. Planning deficiencies also persisted in specialized areas, such as psychosocial training for personnel (25%) and the provision of separate spaces for shelter and learning (25%). These findings underscore the necessity of a more inclusive, community-driven approach, aligning with Dela Cruz et al. (2022), who emphasize that achieving true disaster resilience requires thorough community involvement and shared accountability between local stakeholders and school administrations to bridge existing infrastructure and participatory gaps.

Table 9. Challenges Encountered in the Implementation of CSS

Indicators	School A	School B	School C	School D
	% of Challenge	% of Challenge	% of Challenge	% of Challenge
1. Lack of sufficient educational facilities and equipment for evacuation areas	100	100	0	0
2. Lack of WASH facilities for physically impaired individuals	0	0	100	100
3. School waste management practices	100	0	0	0
4. Transportation means during emergency situations	0	0	100	100
5. Plan for inclusive access to water sanitation facilities for people with physical disabilities	100	0	0	0
6. Absence of plan to have separate spaces for shelter and for learning	0	100	0	0
7. Training for educational personnel in psychosocial support for learners	0	0	100	0
8. Identifying and engaging parent volunteers	100	0	0	100
9. Weak coordination and networking between schools and local stakeholders.	0	0	0	100
10. Students' participation in DRRM-related extracurricular activities like skills Olympics.	100	0	100	100
11. Conducting activities to communities focusing on the four thematic areas of DRRM.	0	100	100	0

100%-Very Challenging 0%-Not Challenging

3.4. Recommendation to Address the Implementation of CSS in the Selected Public Schools in the Division of Camarines Norte

To address the identified implementation gaps, the researcher developed a comprehensive Action Plan (Table 10) designed to strengthen CSS and DRRM practices across the four selected schools. This plan provides structured guidance for school heads and teachers to enhance the enabling environment, upgrade safe learning facilities through DPWH coordination, institutionalize psychosocial support, and sustain the 100% curriculum integration of DRR and CCA concepts. The proposed model emphasizes stakeholder accountability and inclusive governance, requiring a collaborative evaluation by teachers, supervisors, and officials from DepEd and CHED. By establishing rigorous success indicators, including functional WASH facilities, quarterly drills, and the maintenance of updated classroom DRRM corners, the action plan ensures a localized, resilient, and sustainable approach to school safety that meets national standards within the Division of Camarines Norte.

Table 10. Enhancing the Implementation of the Comprehensive School Safety (CSS) Framework and Disaster Risk Reduction and Management (DRRM) in Selected Public Secondary Schools in the Division of Camarines Norte

Goal To strengthen the implementation of the Comprehensive School Safety (CSS) Framework and improve Disaster Risk Reduction and Management (DRRM) practices for safer, more resilient, and inclusive learning environments.

I. Enabling Environment

Objectives	Key Activities/Strategies	Persons Involved	Time Frame	Expected Output	Success Indicators
1. Strengthen policy implementation and institutional support for DRRM.	- Review and update school DRRM policies and contingency plans. - Align school plans with the Division DRRM Framework. - Conduct quarterly DRRM committee meetings.	School Heads, DRRM Coordinators, Division DRRM Officer	Quarterly	Updated and approved DRRM policies and plans	100% of schools have updated, SDO-approved DRRM plans
2. Enhance stakeholder engagement and collaboration.	- Conduct stakeholder consultative meetings. - Establish formal partnerships with LGUs, BFP, PNP, and NGOs. - Create a DRRM community support network.	School Heads, LGUs, BFP, PNP, NGOs, PTA	Biannual	Strengthened linkages and MOAs	90% of schools have active DRRM partnerships
3. Promote participatory governance in DRRM.	- Institutionalize student and parent involvement in DRRM planning and drills. - Include DRRM in student leadership and PTA agendas.	DRRM Team, SSG Officers, PTA Officers	Throughout SY	Increased stakeholder participation	100% of schools include DRRM in governance activities

II. Safe Learning Facilities

Objectives	Key Activities/Strategies	Persons Involved	Time Frame	Expected Output	Success Indicators
1. Ensure school buildings meet safety and structural standards.	- Conduct safety inspection and hazard mapping. - Coordinate with DPWH for structural assessment. - Implement minor retrofitting and repair projects.	School Heads, Division Engineer, LGU, DPWH	Annually	Safe and structurally compliant facilities	100% of classrooms assessed and certified safe
2. Improve WASH (Water, Sanitation, and Hygiene) and evacuation facilities.	- Upgrade handwashing areas and toilets. - Establish gender-responsive and disability-friendly evacuation centers. - Provide emergency kits and signage.	School DRRM Team, LGU, PTA	SY 2025–2026	Improved WASH and evacuation systems	100% of schools with functional WASH and evacuation areas
3. Integrate environmental protection in school safety.	- Conduct tree-planting and clean-up drives. - Establish eco-zones and waste segregation stations. - Implement Zero Waste campaigns.	Science Dept., YES-O, Eco-Clubs, LGU ENRO	Quarterly	Cleaner and greener school environments	90% reduction in unsegregated waste

III. School Disaster Management

Objectives	Key Activities/Strategies	Persons Involved	Time Frame	Expected Output	Success Indicators
1. Strengthen preparedness and emergency response.	- Conduct quarterly earthquake, fire, and flood drills.	DRRM Coordinator, Red Cross, Health	Quarterly	Improved school emergency preparedness	100% of schools conduct drills and have complete emergency kits

Objectives	Key Activities/Strategies	Persons Involved	Time Frame	Expected Output	Success Indicators
2. Build psychosocial support capacity.	- Update emergency kits and first-aid materials. - Establish student marshal teams.	Teachers	Biannual	Functional psychosocial support system	100% of schools trained in PFA
	- Train guidance counselors and teachers in Psychological First Aid (PFA). - Develop referral pathways for crisis management. - Establish peer support groups.	Guidance Counselors, Division Health Unit			
3. Strengthen communication and coordination mechanisms.	- Install DRRM information boards and early warning systems. - Utilize group chats, SMS, or radio for emergency alerts.	DRRM Coordinator, ICT Officer, Radio Groups	Continuous	Effective communication channels	100% of schools maintain active DRRM communication protocols

IV. Risk Reduction and Resilience Education (RRRE)

Objectives	Key Activities/Strategies	Persons Involved	Time Frame	Expected Output	Success Indicators
1. Sustain 100% integration of DRR and CCA in the curriculum.	- Review lesson exemplars to ensure vertical and horizontal integration. - Conduct Learning Action Cell (LAC) sessions on DRR pedagogy.	Subject Teachers, DRRM Coordinator, Curriculum Head	SY 2025–2026	Fully integrated DRR and CCA curriculum	100% compliance with DRR integration
2. Enhance teaching and learning materials for RRRE.	- Develop localized IEC materials and DRRM activity modules. - Maintain updated classroom DRRM corners with visual materials.	Teachers, SSG, YES-O	Quarterly	Enriched RRRE learning materials	100% of classrooms have updated DRRM corners
3. Promote experiential learning and community outreach.	- Organize DRR school fairs, exhibits, and simulations. - Partner with barangays for student-led risk assessments. - Conduct environmental awareness campaigns.	Teachers, LGUs, Students, NGOs	Annual	Active student participation in DRR initiatives	At least one major DRR outreach project per school per year

Monitoring and Evaluation

Objectives	Key Activities	Persons Involved	Time Frame	Expected Output	Success Indicators
Ensure continuous improvement of CSS and DRRM implementation.	- Conduct annual DRRM audit and evaluation. - Submit progress reports to the Schools Division Office. - Recognize model schools for best DRRM practices.	Division DRRM Officer, School Heads, DRRM Coordinators	Annual	Enhanced compliance and documentation	100% submission of annual DRRM reports

4. Conclusion and Recommendations

Based on the findings, the study concludes that the selected public secondary schools in Camarines Norte have established a thorough, systemic CSS framework that prioritizes student safety and shared responsibility through curriculum and governance integration in accordance with DepEd policies. While these institutions demonstrate strong readiness and adaptability, their effectiveness is significantly hampered by structural and logistical constraints, including dilapidated infrastructure, limited resource allocation, and inadequate training materials. Consequently, the proposed action plan offers a vital, workable framework for bridging these gaps by institutionalizing resource mobilization, continuous capacity building, and strengthened multi-sectoral partnerships to ensure a fully resilient and inclusive learning environment.

To enhance institutional disaster resilience, it is recommended that schools and the Schools Division Office (SDO) institutionalize the proposed Comprehensive School Safety (CSS) and DRRM Enhancement Plan, incorporating yearly risk profiling (SOP 1) and the publication of a CSS Best Practices Compendium (SOP 2) to serve as a regional model. Public schools should prioritize student-led DRRM projects, regular equipment updates, and specialized staff training in psychosocial support, while the Department of Education (DepEd) must provide sustained technical assistance, region-specific training modules, and rigorous monitoring audits. Local Government Units (LGUs) and stakeholders are urged to allocate dedicated funding for infrastructure retrofitting and inclusive WASH upgrades, fostering multi-sectoral partnerships for coordinated resource sharing. Furthermore, targeted intervention programs should be developed to bridge identified gaps in resource provision and facility maintenance (SOP 3). Finally, future researchers should explore digital innovations in emergency preparedness and conduct longitudinal studies on the behavioral and mental health impacts of resilience education to ensure the long-term sustainability of safe, inclusive learning environments.

Acknowledgment

The researcher expresses his profound gratitude to the Almighty God for the divine wisdom and strength that made this endeavor possible. Sincere appreciation is extended to his adviser, Merle C. Fontanilla, EdD, for her academic rigor and unwavering support, and to Sonia S. Carbonell, PhD, Dean of Mabini Colleges, Incorporated – Graduate School, for her visionary leadership and encouragement. The researcher is also indebted to the research committee and panel of examiners for their expert critiques, as well as the Department of Education – SDO Camarines Norte for their professional collaboration. Finally, heartfelt thanks are given to his family, friends, and especially his wife, Mary Grace P. Ferrer, whose constant love, prayers, and reminders of purpose provided the necessary tenacity to complete this study.

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