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Extent Of Implementation of School-Based Disaster Risk Reduction Management (SBDRRM) Program in Elementary Schools in Northern Conner District

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Abstract

Educational institutions play a vital role in ensuring safety and resilience against disasters, making the evaluation of their preparedness programs essential. This study assessed the extent of implementation of the Disaster Risk Reduction and Management of the elementary schools in Northern Conner District during the School Year 2022-2023. The descriptive method of research was used for the study with the survey questionnaire as the main tool to gather data from the two groups of respondents, the big and small schools. The questionnaires were patterned from the study "Disaster Risk Reduction and Management Plan of Selected Public Schools in Marikina City" by Mark R. Escobar. The study involved 90 SBDRRM teams of elementary schools in the Northern Conner District. The statistical tools used to treat the data were weighted mean, t-test, and ranking. The salient findings of the study are both big and small schools assessed the implementation of Disaster Risk Reduction and Management with an average weighted mean of 2.77 respectively which was verbally interpreted as a high extent. Results revealed that there is no significant difference in schools' extent of implementation of the SBDRRM program when schools are grouped according to the population. There is no significant difference in schools' extent of implementation of SBDRRRM along the four components. The top five most prevalent challenges and problems met by the respondents are as follows: first, lack of teachers' training for DRRM; second, unclear funding source to sustain DRRM plans, programs, and activities; third, unavailability of resources to implement DRRM plans, programs, and activities; fourth, lack of understanding of the DRRM plan, concept, implementation, importance and experience and fifth, unclear roles of the members. From the findings of the study, the following conclusion was drawn: The SBDRRM Program of the elementary schools of the Northern District of Conner was assessed with a high extent of implementation. However, there is a need for enhancement of the SDRRM Program by capacitating its members with relevant training related to DRRM and fostering linkages and membership to DRRM-related and recognized organizations and patients. These predictors, however, need further work to validate reliability.

Keywords: Disaster Risk Reduction Management; Program; Schools

1. Introduction

The Philippines is exposed to various natural and human-induced hazards. In times of disasters, education is one of the most vulnerable sectors. Disasters often disrupt learning and the normal operations of schools and DepEd offices; they also threaten and affect both the lives of learners and personnel and other educational resources and investments. Disasters are caused by natural or man-made occurrences where people encounter serious damage and experience loss of lives and belongings. They cause interruption to the people's social structure and affect people's essential role (Soriano, 2019). Disasters come in different ways that can affect the entire nation. There are types of disasters: Man-made disasters are events such as chemical spills, industrial accidents, marine pollution, war, and acts of terror. Hybrid disasters are those that result from both man-made and natural causes (Shaluf, 2007). The reason for the frequency of natural disasters is the misuse of nature and the environment by the people such as the destruction of the forests,

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agricultural areas, and freshwater resources which cause a lot of floods, fires, storms, and similar kinds of disasters (Ozmen, 2006).

A large part of the globe experiences increased risks of natural disasters and calamities. It is undeniable that no one is exempted or able to prevent such a phenomenon. However, through planning and assessment, complete avoidance of potential adverse impacts can be action taken in advance (Hoffmann and Muttarak, 2017). The significant number of casualties reduced if the community understood and prepared enough for the disaster. By training the people, the rate of losses and damage may be lessened and even in some cases may be prevented (Reynoso and Cabigan, 2021). Getting residents involved in all aspects of disaster risk reduction including educating, planning, preparing, practicing, and adopting disaster policy will greatly contribute to the community's resilience. Disaster risk reduction and management apply whenever naturally caused disaster or calamity strikes (Bacus, 2020). The reason for this management approach is to minimize injuries and mortalities. It is the systematic process of using administrative directives, operational skills, and capacities to implement strategies, policies, and improved coping capacities to lessen the adverse impacts of hazards and the possibility of disaster (Oro and Benavides, 2020).

In a natural calamity or a manmade-induced disturbance, it is the children that are the most vulnerable. School children stay an average of eight hours in school; it necessitates all schools to ensure high precautionary measures to ensure school children's safety (Maglangit et. al, 2019). Disaster risk reduction has established that through effective education, children are actively involved in identifying their exposure and consequential level of risk to various disasters. They can also be empowered to identify and prevent certain disasters and make decisions that reduce these risks. In practicing drills in school, they would be able to share them with their family members (Corpuz, (2018).

A synchronized and national earthquake drill or simulation in schools all over the Philippines was then being conducted. Disaster management is an emerging answer to the significant challenges of calamities. Through an ethic of prevention, Disaster Risk Reduction aims to reduce the damage caused by natural hazards like earthquakes, floods, droughts, and cyclones (Peek et. al, 2017). Republic Act (RA) No. 10121 entitled Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010 mandates all national government agencies to institutionalize policies, structures, mechanisms, and programs from national to local levels. The National Disaster Risk Reduction and Management Plan (NDRRMP) cover four thematic areas, namely, (1) Disaster Prevention and Mitigation; (2) Disaster Preparedness; (3) Disaster Response; and (4) Disaster Rehabilitation and Recovery which serves as "the principal guide to disaster risk reduction and management (DRRM) efforts to the country (Parajuli, 2020).. At the national level, the NDRRMP asserts that DRRM should be integrated into the various national development and action plans of government agencies (Manalo and Manalo, 2020).

One of the agencies is the Department of Education (DepEd). DepEd Order No. 55 s. 2007 prioritizes the mainstreaming of disaster risk reduction in the school system (Torres et. al, 2019). The prolonged use of schools as evacuation centers, the school damage, loss of equipment, loss of instructional resources, or even the absence of teachers was some of the common results of disasters. Schools and learners are among those who suffer a lot during extreme disasters (Cruz and Ormilla, 2022). The upgrading of the comprehensive DRRM in the DepEd, institutionalized DRRM in the basic education system. It is composed of SDRRM Chairman, SDRRM CoChairman, Early Warning Team, Disaster Management, and Relief Services, Camp.

Management and Relief Services, Damage Assessment and Head Analysis, and Recovery and Rehabilitation. Here, the SDRRM team works in implementing Disaster Risk Reduction Management (DRRM) in the school, DO.no.23, s.2015 entitled "StudentLed School Watching and Hazzard Mapping", instructed the SDRRM Team to engage learners in identifying different types of hazards and vulnerabilities in school. Similarly, DO.no. 27, s.2015 entitled "Promoting Family Earthquake Preparedness", by the DepEd, also instructed the SDRRM Team to conduct DRRM activities such as earthquake drills. The Department of Education has responded to the responsibility of ensuring a safe and hazard-free learning environment by promoting the disaster and risk reduction program (Regis, 2020). Similarly, the schools of the Northern Conner District have responded to this mandate.

The goal of this study was to examine the extent of implementation of the school-based Disaster Risk Reduction and Management Program and its goals. It focuses on examining how schools within Northern Conner District implement the program if a natural or a human-made induced disaster occurs during class days. However, little attention to DRRM programs and activities has been given to the learners by the education sector, especially to learners who are more vulnerable to damage, suffering, injuries, loss of academic performance, and even death. In this regard, being designated SDRRM Coordinator, the researcher is motivated to conduct an assessment on the study implementation of the SBDRRM Program in public elementary schools in Northern Conner District as well as the profile of the respondents which identified and correlated to the level of implementation of SBDRRM.

This study assessed the level of implementation of the school-Based Disaster Risk Reduction and Management (SBDRRM) Program in public elementary schools of the Northern Conner District. It specifically examined the schools' profiles in terms of population, the extent of implementation of SBDRRM across its four components, disaster prevention and mitigation, disaster preparedness, disaster response, and disaster rehabilitation and recovery, and whether significant differences exist when schools are grouped according to population or across the four components. Finally, the study also identified the problems encountered by respondents in implementing the SBDRRM Program.

2. Methodology

2.1. Research Design

The study used the descriptive- assessment survey, it will assess the extent of implementation of School-Based Disaster Risk Reduction Management in the elementary schools of Northern Conner district for SY. 2022-2023.

2.2. Locale of the Study

The study was conducted in public elementary schools of Northern Conner District.

2.3. Respondents of Study

The respondents of the study were the elementary schools of Northern Conner District. In each school, there is an SBDRRM Team composed of the School Head, Teachers, Parents, and Barangay Officials. A total of ninety SBDRRM Team for the S.Y.2022-2023.

Table 1 The Respondents of the Study

Name of School	SBDRRM Team
Guina-ang Elementary School	6
Manag Elementary School	6
Conner Central School	6
Ili Elementary School	6
Paddig Elementary School	6
Ripang Elementary School	6
Caglayan Elementary School	6
Paddaoan Elementary School	6
Cubet Elementary School	6
Mabaguio Elementary School	6
Talifugo Elementary School	6
Buguit Elementary School	6
Liwan Elementary School	6
Guinamgamman Elementary School	6
Catub Elementary School	6
Total= 15	90

2.4. Sampling Technique

The stratified Random Sampling method was employed in identifying the schools and total enumeration for the SBDRRM Team in this study.

2.5. Research Instrument

The questionnaire was the main instrument used to gather the needed data. Part I of the questionnaire obtained information on the school's profile. Part II consisted of the extent of implementation of School-Based Disaster Risk Reduction Management along the four components of implementation. The questionnaires were patterned from the study "Disaster Risk Reduction and Management Plan of Selected Public Schools in Marikina City" by Mark R. Escobar. Part III of the tool gathered the problems encountered by the respondents in the implementation of SBDRRM.

2.6. Statistical Analysis

Data obtained from the survey was analyzed using the following: The profile of Schools will be tabulated and analyzed using frequency counts and percentages. Mean and a corresponding scale for interpretation were used to measure the schools' extent of implementation of School-Based Disaster Risk Reduction Management using a 4-point Likert Scale to provide statistical descriptions of the means on the assessment respectively

Table 2 Likert Scale to Interpret Extent of Implementation

Scale	Range	Description
4	3.25 – 4.00	Very high extent (VHE)
3	2.50 – 3.24	High extent (HE)
2	1.75 – 2.49	Moderate Extent (ME)
1	1.00 – 1.74	No extent at all (NE)

The T-test and the One-Way Analysis of Variance (ANOVA) were used to test the significant difference in the schools' assessment of the significant difference when Schools are grouped according to population along the four components of implementation. The narrative analysis and ranking were used to identify problems encountered by the respondents in the implementation of School-Based Disaster Risk Reduction Management.

3. Results And Discussion

3.1. Profile of Schools

Table 3 Frequency and Percentage Distribution of profile of school in terms of population.

School Size	Name of Schools	Frequency	Percentage
Big Schools	Guina-ang Elementary School Manag Elementary School Conner Central School Ili Elementary School Paddig Elementary School Ripang Elementary School Caglayan Elementary School Paddaoan Elementary school	48	53.33%
Small Schools	Cubet Elementary School Mabaguio Elementary School Talifugo Elementary School Buguit Elementary School Liwan Elementary School Guinamgamman Elementary School Catub Elementary School	42	46.67%
Total		90	100%

Table 3 shows the frequency and percentage distribution of the profile of schools in terms of population. As shown from the table majority or 46.67% are big schools while 53.33% are small schools. This implies that most respondents are from big schools.

3.2. Extent of the Implementation of School-based Disaster Risk Reduction Management in the Four Components

Table 4 Disaster Prevention and Mitigation

Indicators	**BIG SCHOOLS**		**SMALL SCHOOLS**		**Over All**	
	X	DI	X	DI	X	DI
A.1 The school community is oriented with measures to take before, during, and after an earthquake.	3.28	VHE	3.63	VHE	3.46	VHE
A.2 The school community is oriented with a comprehensive earthquake response, recovery, and preparedness plan.	3	HE	3.43	HE	3.22	VHE
A.3 The school buildings have passed the requirements of the building code and construction standards.	2.28	ME	2.52	HE	2.4	ME
A.4 The school buildings are earthquake resistant and not built along or near a fault line	3.85	VHE	2.89	HE	3.37	VHE
A.5 Classrooms and buildings were subjected to hazard assessment.	2.14	ME	1.88	ME	2.01	ME
A.6 Vulnerable windows in the classrooms and other school buildings are equipped with safety/toughened glass or covered with protective materials.	1.72	NE	1.97	ME	1.85	ME
A.7 School furnishings and equipment are designed and installed to minimize potential harm they might cause to students, teachers, school heads, and staff.	2.57	HE	2.34	ME	2.46	ME
A.8 Earthquake risk assessment of the school is done periodically.	3.42	VHE	2.83	HE	3.12	HE
A.9 All-natural hazards posing a threat to the school have been identified. The school population and local community are aware of the risks of these hazards.	3.29	VHE	3.16	HE	3.23	HE
A.10 The school and local community are aware of how they can reduce their vulnerability to the damaging impacts of an earthquake. They are actively taking measures to do so.	2.71	HE	2.89	HE	2.8	HE
TOTAL	2.82	HE	2.76	HE	2.79	HE

Table 4 shows the mean assessment of Schools in the extent of implementation of SBDRRM in Prevention and Mitigation. As can be gleaned, all groups of respondents gave mean assessments described as high extent. This implies that the prevention and mitigation components of SBDRRM are adequately or well implemented as perceived by the respondents.

Table 5 Disaster Preparedness

Indicators	**Big Schools**		**Small Schools**		**Over All**	
	X	DI	X	DI	X	DI
B.1 The school conducts monthly earthquake drills in compliance with the DepEd Memorandum/Order No. 21 s. 2015.	3.14	HE	3.22	VHE	3.18	HE
B.2 The school head determines earthquake drill procedures and informs students, faculty members, and staff about it.	3.01	HE	2.85	HE	2.93	HE
B.3 There are programs that involve parents in the discussion of school policies regarding students' release or retention after an earthquake as well as programs in the development of family preparedness plans.	2.71	HE	2.99	HE	2.85	HE
B.4 The school has a designated evacuation area outlined in the institution's evacuation plan which was surveyed and approved by DepEd officials and local authorities. The location of the designated evacuation area is safe, near, and accessible from the school.	3.28	VHE	3.12	HE	3.2	HE
B.5 The school has a disaster preparedness and contingency plan.	3.42	VHE	3.01	HE	3.21	HE
B.6 The school has an available and abundant supply of bottled water, food, and medicine in case of an earthquake.	2.01	ME	1.93	ME	1.97	ME
B.7 The school has a list of availability and map locations for first aid and other emergency supplies.	1.86	ME	2.12	ME	1.99	ME
B.8 All classroom doors are always open. Office doors open outwards. Exit pathways are kept clear from any blockage.	2.86	HE	3.17	HE	3.01	HE
B.9 The faculty members, students, and staff are encouraged to maintain an emergency survival kit within their offices and classrooms. The school or the assigned committee checks or evaluates the content of the first aid or survival kit within offices and classrooms.	2.86	HE	2.45	ME	2.66	HE
B.10 Disaster Risk Reduction and Management is integrated in the school's curriculum.	3.72	VHE	3.23	HE	3.48	VHE
TOTAL	2.89	HE	2.81	HE	2.85	HE

Table 5, in terms of Disaster Preparedness in the SBDRRM, the highest mean assessment was given by the group of big schools which is 2.89 while the small schools gave a mean assessment of 2.81. However, both mean assessments are described as high extent. Overall, the mean assessments of the groups of respondents are interpreted to a high extent. This implies that the disaster preparedness component of SBDRRM is also well implemented.

Table 6 Disaster Response

Indicators	Big Schools		Small Schools		Over All	
	X	DI	X	DI	X	DI
C.1 The school utilizes the local emergency services hotlines and officials (e.g., fire police, city emergency managers) to become informed concerning how they may assist the institution in the event of an earthquake	3.44	VHE	3.15	HE	3.29	HE
C.2 The school has a backup communications system that will allow contact with the community, city or local emergency operations centers.	3	VHE	2.85	HE	2.93	HE
C.3 The school has an internal communications system such as walkie-talkies or megaphones.	2.72	HE	2.93	HE	2.83	HE
C.4 The school collaborates with the community, city, or local emergency preparedness coordinators and ensures that support authorities are aware of the institution's plan.	3.15	HE	2.82	HE	2.98	HE
C.5 The school reviews the plan with local and state offices of emergency services	2.79	HE	2.79	HE	2.79	HE
C.6 A disaster risk reduction and management task force exists in the school. The assigned committee members are knowledgeable in the execution of their functions to address overall risk reduction of students, faculty members, and staff safety.	2.42	ME	1.86	ME	2.14	ME
C. 7 The faculty members and staff know their roles and responsibilities under the emergency plan.	2.43	ME	1.92	ME	2.18	ME
C.8 The faculty members and staff are trained in first aid, damage assessment, recovery, and fire suppression.	1.86	ME	1.56	NE	1.71	ME
C.9 The faculty members and staff are prepared they can be designated as disaster service workers and may be required to remain at the school for several days if an earthquake hits during school hours.	2.83	HE	2.57	HE	2.7	HE
C.10 The locations of hazardous and flammable chemicals, circuit breakers, and safety boxes in the school buildings had been determined. A committee is appointed to check on these after an earthquake.	3.14	HE	3.07	HE	3.11	HE
TOTAL	2.78	HE	2.55	HE	2.67	HE

As shown from the above table 6, both big and small schools assessed the implementation of Disaster Response of the SBDRRM with means of 2.71 and 2.90 respectively which are all described as high extent. This means that the disaster response component of SBDRRM is well-implemented.

Table 7 Disaster Rehabilitation and Recovery

Indicators	Big Schools		Small Schools		Over All	
	X	DI	X	DI	X	DI
D.1 The school has arrangements with structural engineers who will report to the building immediately after an earthquake to assess damage	2.75	ME	2.14	HE	2.45	ME
D.2 There is a contingency plan to ensure that school operations continue and facilitate the immediate resumption of classes after an earthquake.	2.88	ME	2.43	HE	2.67	HE
D.3 The school heads, teachers, students, and staff are knowledgeable of the principles of incident command systems or similar standard emergency management systems for organizing post-disaster self-help in the sch	2.96	HE	2.57	HE	2.76	HE

D.4 A school team is designated to conduct an immediate assessment and monitoring of the effects of the earthquake.	2.96	HE	2.71	HE	2.83	HE
D.5 The school may serve as a shelter or evacuation center after an earthquake.	2.9	HE	2.71	HE	2.81	HE
D.6 The school has a plan for setting up preidentified temporary learning spaces (TLS) after an earthquake.	3.28	VHE	3.03	HE	3.12	HE
D.7 The school has a clean-up plan after an earthquake.	3.01	HE	2.86	HE	2.94	HE
D.8 The school has available learning materials and alternative delivery modes of education in the unavailability of classrooms.	3.42	VHE	2.92	HE	3.17	HE
D.9 Teachers have background knowledge or training to provide psychosocial support to students after an earthquake.	2.43	ME	2.28	ME	2.36	ME
D.10 Mechanisms and resources are in place to ensure school rehabilitation is financed and executed.	2.56	HE	2.48	ME	2.52	HE
TOTAL	2.91	HE	2.61	HE	2.76	HE

Table 7 shows the assessment of the schools on the extent of implementation of SBDRRM along Disaster Rehabilitation and Recovery. All of the schools' mean assessments are described as high extent. The lowest mean assessment of schools of this specific component of SBDRRM might imply that their respective schools receive little or small support in terms of rehabilitation and recovery after or during disasters.

Table 8 Over All Mean

FOUR COMPONENTS	**CATEGORY MEAN**	
	X	DI
A. *Disaster Prevention and Mitigation*	2.79	HE
B. Disaster Preparedness	2.85	HE
C. Disaster Response	2.67	HE
D. Disaster Rehabilitation and Recovery	2.76	HE
OVERALL MEAN	2.77	HE

Table 8 presents the summary of the assessments of the schools of the four components of the SBDRRM. Disaster preparedness has the highest mean assessment of

2.85 followed by the Disaster Prevention and Mitigation component with a mean of 2.79. The least implemented component as per the assessment of the schools is Disaster Response with a mean of 2.67. All of the category means of assessments for the four components are described as high extent of implementation. The above mean assessments of the schools of the components of SBDRRM mean that it is being implemented well and implies little improvement and continuing enhancement and sustainability.

3.3. Significant difference in schools' extent of implementation to SBDRRM

Table 9 Significant difference in schools' extent of implementation to SBDRRM when schools grouped according to population

School size	**N**	**Mean**	**t-value**	**p-value**	**Decision**
Big Schools	8	2.85	1.553	0.124	Accept Ho
Small Schools	7	2.68			

As gleaned in Table 9, the computed value t=1.553 and the probability value p=0.124 which is greater than 0.05 level of significance indicate that there is no significant difference in schools' extent of Implementation of School-based Disaster Risk Reduction Management when grouped type of school size. This implies that big school is not comparable to small school in their extent of Implementation of School-based Disaster Risk Reduction Management.

3.4. Significant difference in respondents' extent of implementation to SBDRRM

Table 10 Significant difference in respondents' extent of implementation to SBDRRM along the four components

Components	Mean	f-value	p-value	Decision
Disaster Prevention and Mitigation	2.76	1.612	0.189	Accept Ho
Preparedness	2.98			
Response	2.80			
Rehabilitation and Recovery	2.84			

As gleaned from Table 10, the computed value t=1.612 and the probability value p=0.189 which is greater than 0.05 level of significance indicate that there is no significant difference in schools' extent of Implementation of School-based Disaster Risk Reduction Management along the four components.

3.5. Problems encountered by the Respondents

Table 11 Problems encountered by the respondents in the implementation of the SBDRRM Program

Problems encountered	Frequency	Rank
Lack of teachers' training for DRRM.	*78*	*1st*
Unclear funding sources to sustain DRRM plans, programs, and activities.	*65*	*2nd*
Unavailability of resources to implement DRRM plans, programs, and activities.	*53*	*3rd*
Lack of understanding of the DRRM plan, concept, implementation, importance, and experience.	*48*	*4th*
Unclear roles of the members of the school disaster risk reduction and management team.	*35*	*5th*
Lack of parents' engagement to support DRRM plans, programs, and activities.	*28*	*6th*
Lack of coordination between and among stakeholders.	*25*	*7th*

Table 11 presents the ranking of the problems met by the respondents in the implementation of the Disaster Risk Reduction and Management Program. It can be gleaned from the table that the top five most prevalent challenges and problems met by the respondents are as follows: first, lack of teachers' training for DRRM; second, unclear funding source to sustain DRRM plans, programs, and activities; third, unavailability of resources to implement DRRM plans, programs, and activities; fourth, lack of understanding of the DRRM plan, concept, implementation, importance and experience and fifth, unclear roles of the member of the School Disaster Risk Reduction and Management. This implies that the challenges and problems met by the respondents fall in four major areas: planning and administration, teachers' training, budgeting, and equipment and facilities. It also entails that teachers need to undertake rigorous training for DRRM. School heads should provide opportunities for mass training of teachers for DRRM. The Department of Education should allocate adequate funds to sustain and procure resources, materials, and equipment needed in the implementation of DRRM plans, programs, and activities.

4. Conclusion

The school-Based Disaster Risk Reduction and Management (SBDRRM) Program in the elementary schools of the Northern District of Conner was assessed to have a high extent of implementation, reflecting the schools' commitment to disaster preparedness and safety. However, the findings also highlight the need for continuous improvement, particularly in strengthening the capacity of SDRRM members through relevant and updated training on disaster risk reduction and management. In addition, fostering stronger linkages and partnerships with recognized DRRM-related

organizations can further enhance program effectiveness, provide access to additional resources, and ensure sustainability. By investing in capacity-building and collaboration, schools can elevate their preparedness, response, and recovery strategies, thereby ensuring a safer and more resilient learning environment for both learners and personnel.

Compliance with ethical standards

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I acknowledge that I have not used ChatGPT or Copilot for refining some of the sections in the document.

Disclosure of conflict of interest

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

Statement of ethical approval

The study was conducted with approval and in accordance with the standards of the college. No ethical approval was required, as the research followed all applicable ethical guidelines, ensuring respect for the respondents' privacy and confidentiality

Statement of informed consent

I affirm that the respondents voluntarily agreed to participate after being fully informed about the purpose, nature, and potential implications of the study. Their responses have been collected with utmost respect for their privacy and confidentiality, in accordance with ethical research guidelines.

References

[1] Bacus, J. B. (2020). Disaster risk reduction management in carcar central elementary school Cebu City. CMU Journal of Science, 24(1), 19-25.

[2] Cruz, R. D. D., and Ormilla, R. C. G. (2022). Disaster risk reduction management implementation in the public elementary schools of the Department of Education, Philippines. International Journal of Disaster Risk Management, 4(2), 1-15.

[3] Corpuz, A. C. (2018, October). Disaster risk management practices and readiness for disasters among selected schools in Biñan City, Laguna. In 11th International Scholars Conference (Vol. 6, No. 1, pp. 252-252).

[4] Hoffmann, R., and Muttarak, R. (2017). Learn from the past, prepare for the future: Impacts of education and experience on disaster preparedness in the Philippines and Thailand. World Development, 96, 32-51.

[5] Maglangit, M., Pagobo, A., Adem, A., Gagani, R., and Montalban, R. (2019). Disaster and risk reduction preparedness evaluation of the 6th district schools of Lapu-Lapu City. American Journal of Humanities and Social Sciences Research, 3(5), 203-206.

[6] Manalo, R. G. M. V., and Manalo, M. V. (2020). Exploring the Gap in Implementing the Philippine Disaster Risk Reduction and Management Law (RA 10121) in the K-12 Senior High School Institutions' Curricula. Retrieved from FNH-07. pdf (dlsu. edu. ph).

[7] Oro, N. B., and Benavides, N. G. (2020). Enhancement on Disaster Risk Reduction and Management (DRRM) operations of the schools in the 2nd Congressional District of Sorsogon. International Journal of Novel Research in Marketing Management and Economics, 7(2), 77-82.

[8] Ozmen, F. (2006). The level of preparedness of the schools for disasters from the aspect of the school principals. Disaster Prevention and Management: An International Journal, 15(3), 383-395.

[9] Parajuli, R. R. (2020). Citizen Disaster Science Education for effective disaster risk reduction in developing countries. Geoenvironmental Disasters, 7(1), 1-4.

[10] Peek, L., Abramson, D. M., Cox, R. S., Fothergill, A., and Tobin, J. (2017). Children and disasters. In Handbook of disaster research (pp. 243-262). Cham: Springer International Publishing.

[11] Regis, D. (2020). Implementation of the school disaster risk reduction management in public elementary schools in region VIII. Multidisciplinary Research Journal, 2(1), 48-61.

[12] Reynoso, R. A., and Cabigan, M. A. (2021). Measuring school disaster risk reduction management capacity of public schools in Victoria, Laguna. EPRA International Journal of Multidisciplinary Research, 7(7), 401-408.

[13] Shaluf, I. M. (2007). An overview on disasters. Disaster Prevention and Management: An International Journal, 16(5), 687-703.

[14] Soriano, G. (2019). Disaster Risk Reduction Knowledge among local people in a Selected Community in the Philippines. Journal of Health and Caring Sciences, 1(2), 92.

[15] Torres, J., Anglès, L., Grimaz, S., and Malisan, P. (2019). UNESCO Guidelines for Assessing Learning Facilities in the Context of Disaster Risk Reduction and Climate Change Adaptation: Introduction to learning facilites assessment and to the VISUS methodology (Vol. 1). UNESCO Publishing.