

Capabilities of Project Development Officer I in Supporting Disaster Risk Reduction Management Program Implementation Among Schools

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Abstract

This study assessed the capabilities of Project Development Officers (PDOs) in supporting the implementation of the Disaster Risk Reduction Management (DRRM) Program in schools within the Division of Nueva Ecija. Using an evaluative-correlational research design, the study gathered data from 35 PDOs and 35 School Heads who also served as DRRM Coordinators and validators. The study examined the PDOs' profiles in terms of age, sex, educational attainment, number of schools handled, and DRRM-related trainings attended. It also evaluated five capability areas: Project Development, Partner Building, Training and Development, Monitoring and Evaluation, and Documentation and Reporting.

Results showed that most PDOs were 26–30 years old, male, and Bachelor's degree holders. All handled two to three schools, while most had attended one to two DRRM-related trainings. Both PDOs and School Heads/DRRM Coordinators rated the PDOs as *Capable* across all five areas. Documentation and Reporting received the highest rating, while Project Development had the lowest, although it remained within the capable level. Significant relationships were found between sex and educational attainment and Project Development capability, as well as between DRRM trainings attended and Documentation and Reporting capability. Age had no significant relationship with the capability areas, and the five capability dimensions were not significantly related to one another. A Capability Enhancement Plan was proposed to further strengthen PDOs' technical assistance, coordination, planning, monitoring, training, and documentation roles in DRRM implementation.

Keywords: Capabilities of Project Development Officer I in Supporting Disaster Risk Reduction Management Program Implementation Among Schools

1. Introduction

Disaster risk reduction is crucial in the Philippines given the country's vulnerability to multiple natural disasters. Geographically located along the Pacific Ring of Fire, Filipinos recurrently experience earthquakes and typhoons, which cause extreme flooding, landslides, and damage to infrastructure and life. The adverse effects have driven various sectors in society to strengthen policies and programs to reduce disaster risk. The National Disaster Risk Reduction and Management Council (NDRRMC), through the National Disaster Risk Reduction and Management Plan (NDRRMP) for 2021–2028, aims to reinforce

communities to be prepared for possible disasters and to recover from their negative impacts. Guided by the policy frameworks specified in the Climate Change Act of 2009, the Philippine Disaster Risk Reduction and Management Act of 2010, and other policies, the country continues to build initiatives toward disaster risk reduction. The Plan also places strong emphasis on prevention and mitigation, highlighting the importance of preparedness as a proactive approach. It promotes strengthening institutional capacities and community-based strategies to reduce disaster risks before they escalate into emergencies. Disaster Risk Reduction (DRR) refers to systematic efforts to identify hazards, reduce exposure and vulnerability, manage risks, and strengthen preparedness for adverse events. In the Philippine education context, DRR is supported through coordinated policies, planning, preparedness, mitigation, response, and recovery mechanisms. Disaster Risk Reduction and Management (DRRM) refers to the systematic use of administrative directives, organizational arrangements, and operational capacities to reduce the adverse impacts of hazards and strengthen coping capacities (Department of Education, 2021). As presented in various local and international policy agendas, the education sector is one of the most vulnerable during disasters. Schools, particularly, are highly susceptible as young learners often suffer the most severe impacts from both natural and human-induced hazards. The Department of Education (DepEd) recognizes that disasters deprive children of their right to continuous quality basic education in a safe environment. They threaten the lives of learners, their families, and education personnel, and may also result in significant damage to school infrastructure and learning resources (School DRRM Manual, 2021). Thus, reducing disaster risks in the education sector is essential to achieving DepEd's goals in access, quality, and governance. Accordingly, DepEd has institutionalized Comprehensive DRRM within the Basic Education Framework, anchored on three key pillars: (1) Safe Learning Facilities; (2) School Disaster Management; and (3) DRRM in Education. The program focuses on protecting learners and education personnel from harm, ensuring educational continuity during disasters, safeguarding educational investments, and strengthening resilience through education. These interventions are implemented at the school level through the collaboration of the School Planning Team (SPT) and the School DRRM Team (SDRRM Team), which carry out the processes of assessment, planning, capability building, monitoring, evaluation, and reporting. Active participation of the entire school community—students, teachers, non-teaching personnel, and administrators—is essential, with students playing a central role from hazard identification to capacity-building activities. In Nueva Ecija, disaster risk reduction remains a critical concern because recurring typhoons, flooding, and occasional droughts may disrupt classes, damage school facilities, and threaten the safety of learners and education personnel. The Department of Education emphasizes coordinated school-based DRRM, while the Public Disaster Office (PDO) provides technical and coordination support to schools. As a Project Development Officer in the education sector, the researcher is in a position to examine the capabilities of PDOs in supporting school-based DRRM programs. Hence, this study was conducted to assess these capabilities, identify relationships among relevant variables, and use the findings as a basis for a capability enhancement plan that is aligned with the actual support functions of PDOs.

1.1. Scope and Limitation

This study, entitled “Capabilities of Project Development Officer I in Supporting Disaster Risk Reduction Management Program Capability Among Schools,” employed an evaluative–correlational research design. The respondents consisted of thirty-five (35) Project Development Officers (PDOs) from the Division of Nueva Ecija and thirty-five (35) School Heads who also served as DRRM Coordinators and acted as validators of the PDOs' capabilities. Total enumeration was used for the PDO population, while the identified School Heads/DRRM Coordinators were included as validators. Data were gathered through structured questionnaires during School Year 2025–2026. The study was limited to the five capability dimensions stated in the Statement of the Problem: Project Development, Partner Building, Training and Development, Monitoring and Evaluation, and Documentation and Report.

1.2. Tables

Table 1. Profile of the Respondents

	FREQUENCY	PERCENT
AGE		
20-25	1	2.9
26-30	14	40.0
31-35	63	37.1
36-40	4	11.4
41 and above	3	8.6
Total	35	100.0
SEX		
Male	20	57.1
Female	15	42.9
Total	35	100.0
EDUCATIONAL ATTAINMENT		
Bachelor's Degree	33	94.3
With Masteral Units	2	5.7
MA Graduates	0	0
Total	35	100.0
NO OF SCHOOL HEADS HANDLED		
2-3 Schools	35	100.0
4-5	0	0
Total	35	100.0
DRRM TRAININGS ATTENDED		
1-2	23	65.7

3-4	12	34.3
TOTAL	35	100.0

Table 2. Capabilities of PDO in Supporting Disaster Risk Reduction Programs among Schools

	PDO		School Heads	
	wm	Verbal Description	wm	Verbal Description
Project development				
1. Reviewing existing plans, policies and standards.	3.06	Capable	2.86	Capable
2. Developing/enhancing and disseminate risk-informed plans, policies, and standards for capability.	3.29	Highly Capable	3.09	Capable
3. Identifying areas for partnerships with external partners on DRRM, CCA and EiE programs	3.11	Capable	3.11	Capable
4. Establishing a regular coordination mechanism among external and internal partners	3.00	Capable	3.34	Highly Capable
5. Establishing expertise and best practices among external and internal partners	2.89	Capable	3.03	Capable
6. Coordinating the preparation and distribution of materials and interventions for disaster preparedness, response, and recovery.	2.80	Capable	3.09	Capable
7. Identifying areas for partnerships with relevant DepEd offices in connection with DRRM, CCA, and EiE.	3.20	Capable	3.00	Capable
8. Creating uniform templates to accommodate the required data and provide feedback to the different DepEd offices and partners.	3.23	Capable	3.29	Highly Capable
9. Establishing a regular sharing and tracking information among external and internal partners.	3.20	Capable	3.14	Capable
10. Analyzing historical hazards data and official hazard maps to identify possible policies and programs in vulnerable areas.	3.26	Highly Capable	3.03	Capable
Average wm	3.10	Capable	3.10	Capable
Partner Building				
1. Encouraging public and private groups to learn about the benefits of working together in disaster risk reduction.	3.26	Highly Capable	3.29	Highly Capable
2. Encouraging organizations to work together and share information to achieve common goals and use their resources effectively.	3.11	Capable	2.86	Capable
3. Encouraging organizations to work together in creating solutions for disaster risk reduction through sharing information and ideas.	2.91	Capable	3.00	Capable
4. Encouraging organizations to build trust and communicate openly to strengthen collaboration and partnerships.	3.31	Highly Capable	2.97	Capable
5. Encouraging organizations to work with communities and stakeholders to understand their needs and share the benefits of partnerships	3.17	Capable	3.14	Capable

6. Recognizing and promoting successful partnerships in disaster risk reduction to inspire others to do the same.	3.11	Capable	3.00	Capable
7. Encouraging schools to coordinate local government in identifying risk prone areas in school	3.14	Capable	3.31	Highly Capable
8. Encouraging schools in coordinating LGU in possible class suspension during typhoon and other alike	3.06	Capable	2.80	Capable
9. Fostering acknowledgement among local partners who contributed much in risk reduction of schools	3.09	Capable	3.11	Capable
10. Establishing of one-way communication among schools and local partners	3.17	Capable	2.97	Capable
Average wm	3.13	Capable	3.05	Capable

Training and Development

1. Aid in training teachers in emergency response	2.91	Capable	3.09	Capable
2. Assist in empowering school heads and DRRM coordinators in preparing school DRRM plans	3.00	Capable	3.14	Capable
3. Help trained the members technically to administer and coordinate post-disaster relief and rehabilitation.	3.09	Capable	2.97	Capable
4. Helped in facilitating immediate resumption of classes to track learners.	3.20	Capable	3.17	Capable
5. Assist in coordinating with NGOs, GOs, and local and foreign agencies for rehabilitation assistance when needed.	3.40	Highly Capable	3.17	Capable
6. Help in establishing training calendar or roadmap for continuous learning on DRRM innovations, climate adaptation and resilience education	3.17	Capable	2.91	Capable
7. Assist in monitoring interventions on school rehabilitation and school recovery.	3.06	Capable	3.17	Capable
8. Assist in identifying Temporary Learning Spaces and other modes of teaching.	3.00	Capable	2.97	Capable
9. Help in educating and training teachers in assisting stakeholders in time of disaster.	3.17	Capable	3.09	Capable
10. Help in tapping communities for food and volunteer rehabilitation services.	3.31	Highly Capable	3.43	Highly Capable
Average wm	3.13	Capable	3.11	Capable

Monitoring and Evaluation

1. Assist in monitoring the execution of school-based risk reduction projects/ plans and drills	3.43	Highly Capable	3.09	Capable
2. Help in ensuring compliance with DepEd order No 50 s 2011 and RA 10121 (DRRM act)	2.86	Capable	2.97	Capable
3. Assist in gathering report on school vulnerabilities	3.20	Capable	3.03	Capable
4. Helped in monitor school incidents and ensure school updates their school hazards and maps	3.17	Capable	3.14	Capable
5. Help in monitoring activities like simulation drills, evacuation protocols and safety audits	3.06	Capable	3.34	Highly Capable
6. Assist in ensuring proper allocation of school MOOE for DRRM activities	3.00	Capable	3.26	Highly Capable

7. Providing support in preparing spending reports to ensure consistency with approved plans.	3.29	Highly Capable	3.29	Highly Capable
8. Help in assessing whether the schools have working early warning system (EWS) a	2.94	Capable	3.17	Capable
9. Assist in monitor coordination protocols with local DRRM office and barangays	3.17	Capable	3.00	Capable
10. Help in evaluating how DRRM activities improved school safety and preparedness	3.06	Capable	3.14	Capable
Average wm	3.12	Capable	3.14	Capable

Documentation and Report

1. Help in making detailed records of school disaster risk activities	3.03	Capable	3.03	Capable
2. Assist in disaster incidence report the PDO has accurate school damage, affected learners/staff and response effort	3.14	Capable	2.86	Capable
3. Help in recording attendance in trainings	3.46	Highly Capable	2.97	Capable
4. Help in keeping copies of fund utilization reports procurement of emergency kits and others	3.11	Capable	2.97	Capable
5. Assist in preparing of periodic report in school risk management	3.11	Capable	3.23	Capable
6. Help in consolidating reports from teachers or committees involved in DRRM activities.	3.71	Highly Capable	3.60	Highly Capable
7. Assist in maintaining an organized filing system for DRRM documents, photos, and records.	3.54	Highly Capable	3.60	Highly Capable
8. Help in preparing summary reports for submission to higher offices or the division DRRM coordinator.	3.66	Highly Capable	3.60	Highly Capable
9. Support in validating and updating DRRM-related data and statistics of the school.	3.63	Highly Capable	3.69	Highly Capable
10. Assist in documenting best practices and lessons learned from DRRM activities for future reference.	3.60	Highly Capable	3.63	Highly Capable
Average wm	3.40	Highly Capable	3.32	Highly Capable

Table 3. Significant relationship between the profile of the respondents and the Capabilities of PDO in Supporting Disaster Risk Reduction Management Programs among Schools

Spearman's rho	Project Development	Correlation Coefficient	Age	Sex	EA	DRRM Trainings Attended
			-.030	-.346*	-.405*	-.027
		Sig. (2-tailed)	.863	.042	.016	.878
		N	35	35	35	35
	Partner Building	Correlation Coefficient	.163	-.041	.019	.137
		Sig. (2-tailed)	.350	.816	.915	.434
		N	35	35	35	35

Training and Development	Correlation Coefficient	.073	.049	-.167	.321
	Sig. (2-tailed)	.677	.778	.338	.060
	N	35	35	35	35
Monitoring and Evaluation	Correlation Coefficient	.174	-.124	.247	.057
	Sig. (2-tailed)	.318	.476	.153	.744
	N	35	35	35	35
Documentation and Report	Correlation Coefficient	.103	-.291	-.012	.449**
	Sig. (2-tailed)	.556	.090	.944	.007
	N	35	35	35	35

****.** Correlation is significant at the 0.01 level (2-tailed).

***.** Correlation is significant at the 0.05 level (2-tailed).

Table 4. Interrelationship among the variables of Capabilities of PDO in Supporting Disaster Risk Reduction Program Implementation among Schools

			Project Development	Project Development	Project Development	Project Development	Project Development
Spearman's rho	Project Development	Correlation Coefficient	1.000	.053	-.079	.124	.160
		Sig. (2-tailed)		.763	.651	.478	.357
		N	35	35	35	35	35
	Partner Building	Correlation Coefficient	.053	1.000	-.071	.197	-.125
		Sig. (2-tailed)	.763		.687	.256	.474
		N	35	35	35	35	35
	Training and Development	Correlation Coefficient	-.079	-.071	1.000	.029	.019
		Sig. (2-tailed)	.651	.687		.870	.914
		N	35	35	35	35	35
	Monitoring and Evaluation	Correlation Coefficient	.124	.197	.029	1.000	.008
		Sig. (2-tailed)	.478	.256	.870		.965
		N	35	35	35	35	35

Documentation and Report	Correlation Coefficient	.160	-.125	.019	.008	1.000
	Sig. (2-tailed)	.357	.474	.914	.965	
	N	35	35	35	35	35

1.3. Proposed Capability Plan

The findings of the study revealed that the Project Development Officers generally demonstrated satisfactory capabilities across the five dimensions of Disaster Risk Reduction and Management (DRRM): Project Development, Partner Building, Training and Development, Monitoring and Evaluation, and Documentation and Report. The proposed plan therefore focuses on strengthening the PDOs' capacity to support school heads and DRRM Coordinators rather than to manage or directly implement the DRRM Program. Priority areas include evidence-based planning, stakeholder coordination, capacity-building support, monitoring assistance, and reliable documentation.

Key Area	Result	Identified Area for Improvement	Objectives	Proposed Activities	Persons Responsible	Time Frame	Success Indicator
Project Development		Improve coordination and preparation of DRRM materials	Strengthen evidence-based planning and policy development	Advanced Workshop on Risk-Informed Planning, GIS Hazard Mapping, and DRRM Project Design	SDS, SGOD Chief, PDOs, DRRM Coordinator	Quarterly	At least 95% of schools submit updated DRRM plans; Project Development WM increases above 3.30
Partner Building		Strengthen collaborative decision-making and stakeholder engagement	Enhance partnerships with LGUs, NGOs, and private organizations	Multi-Stakeholder DRRM Partnership Forum; Memorandum of Agreement Development Workshop	PDOs, LGUs, MDRRMO, NGOs	Semi-Annual	Increased number of active DRRM partnerships and signed collaboration agreements
Training and Development		Expand DRRM training opportunities for teachers and coordinators	Improve emergency preparedness competencies	Division-wide Training on Incident Command System, Emergency Response, Psychological First Aid, and Climate Change Adaptation	PDOs, DRRM Coordinator, Philippine Red Cross, MDRRMO	Quarterly	100% of School DRRM Coordinators trained annually; increased post-training competency scores
Monitoring and Evaluation		Enhance monitoring of policy compliance and Early Warning	Improve quality assurance and monitoring effectiveness	Development of Digital DRRM Monitoring Dashboard; Monitoring and Evaluation Workshop	SGOD, PDOs, ICT Unit	Every Quarter	Increased compliance rate with DRRM standards; improved monitoring

Systems							reports
Documentation and Report	Sustain excellent documentation practices through digital innovation	Improve efficiency and accessibility of DRRM records	Training on Digital Records Management, Google Workspace, Microsoft Power BI, and Electronic Document Management	PDOs, ICT Coordinator	Semi-Annual		Fully digitized DRRM documentation system; reduced report submission delays

1.4. Presentation of Result

This study determined the capabilities of the Project Development Officers (PDOs) in supporting Disaster Risk Reduction Management (DRRM) Program Capability among Schools, as assessed by the PDO respondents and School Heads who also served as DRRM Coordinators and validators. Specifically, it examined the PDO respondents' profile, the five capability dimensions, the significant relationships between profile variables and capability dimensions, the interrelationships among the capability dimensions, and the proposed Capability Enhancement Plan.

1. Profile of the Project Development Officers

The majority of the Project Development Officers were 26–30 years old (40.0%), followed by those aged 31–35 years (37.1%), indicating that most respondents belonged to the young adult workforce. In terms of sex, male respondents (57.1%) outnumbered females (42.9%). Regarding educational attainment, the majority were Bachelor's degree holders (94.3%), while only 5.7% had Master's units. All respondents (100%) handled two to three schools. Moreover, most respondents (65.7%) had attended one to two DRRM-related training programs, while 34.3% had participated in three to four trainings.

2. Capabilities of the Project Development Officers in Supporting DRRM Programs

Overall, both the Project Development Officers and School Heads/DRRM Coordinators assessed the PDOs as Capable across all five capability dimensions, with Documentation and Report rated Highly Capable. Among the five capability dimensions:

- Documentation and Report obtained the highest ratings from both PDOs (WM = 3.40) and School Heads (WM = 3.32), indicating that documentation, records management, and report preparation were the strongest competencies demonstrated by the PDOs.
- Training and Development obtained an overall weighted mean of 3.13 among PDOs and 3.11 among School Heads, both interpreted as Capable.
- Partner Building obtained a weighted mean of 3.13 among PDOs and 3.05 among School Heads, indicating consistent capability to support partnership initiatives.
- Monitoring and Evaluation was likewise assessed as Capable, with weighted means of 3.12 for PDOs and 3.14 for School Heads.
- Project Development obtained the lowest composite weighted mean (3.10) from both respondent groups but remained verbally interpreted as Capable.

3. Significant Relationship between the Respondents' Profile and the PDOs' Capabilities

The Spearman Rank Correlation analysis revealed that **sex** ($r = -0.346$, $p = .042$) and **educational attainment** ($r = -0.405$, $p = .016$) were significantly related to the **Project Development** capability of the PDOs. Likewise, **DRRM trainings attended** ($r = 0.449$, $p = .007$) demonstrated a significant positive relationship with **Documentation and Report** capability.

Conversely, **age** showed no significant relationship with any capability dimension. Similarly, no significant relationships were observed between the respondents' profile variables and the capability dimensions of Partner Building, Training and Development, and Monitoring and Evaluation.

4. Interrelationship among the Capability Dimensions

The findings revealed no statistically significant interrelationship among the five capability dimensions. All computed correlation coefficients were weak and all probability values exceeded the .05 level of significance. This indicates that Project Development, Partner Building, Training and Development, Monitoring and Evaluation, and Documentation and Report represent distinct capability areas and may require focused enhancement rather than assuming that strength in one area automatically predicts strength in another.

5. Proposed Capability Enhancement Plan

Based on the findings, a Capability Enhancement Plan was proposed to strengthen the PDOs' support functions. The plan focuses on evidence-based project planning, stakeholder coordination, DRRM capacity-building support, monitoring and evaluation assistance, and documentation and reporting, consistent with the actual role of PDOs in supporting school heads and DRRM Coordinators.

1.5. Conclusion

1. The PDO respondents were predominantly 26–35 years old, male, and Bachelor's degree holders; all handled two to three schools, while most had attended one to two DRRM-related trainings.
2. The PDOs were assessed by both PDO respondents and School Heads/DRRM Coordinators as Capable in supporting school-based DRRM programs across Project Development, Partner Building, Training and Development, Monitoring and Evaluation, and Documentation and Report, with Documentation and Report emerging as the strongest capability area.
3. Sex and educational attainment had significant relationships with Project Development capability, while DRRM trainings attended had a significant positive relationship with Documentation and Report capability; age was not significantly related to the capability dimensions.
4. The five capability dimensions did not show statistically significant interrelationships, indicating that Project Development, Partner Building, Training and Development, Monitoring and Evaluation, and Documentation and Reporting represent distinct areas that may require focused capability enhancement.
5. A Capability Enhancement Plan is proposed to strengthen the PDOs' support functions through improved evidence-based planning, stakeholder coordination, training assistance, monitoring and evaluation support, and documentation and reporting, consistent with the actual role of PDOs in supporting school heads and DRRM Coordinators.

1.6. Recommendation

1. The Schools Division Superintendent may institutionalize a comprehensive capability enhancement program focusing on Project Development, Partner Building, Training and Development, Monitoring and Evaluation, and Documentation and Reporting to strengthen the PDOs' support functions.
2. The School Governance and Operations Division (SGOD) may provide regular technical assistance, mentoring, and coaching to PDOs in evidence-based project planning, policy support, stakeholder coordination, and school-level DRRM assistance.

3. Human Resource Development Section may expand opportunities for PDOs to participate in advanced DRRM training, project planning seminars, and relevant professional development activities.
4. Project Development Officers may strengthen coordination with School Heads/DRRM Coordinators, Local Government Units, national government agencies, non-government organizations, and private institutions to expand technical assistance, resources, and support for school-based DRRM activities.
5. The Schools Division Office may strengthen digital monitoring, documentation, and reporting systems to support PDOs in validating school reports, consolidating information, and providing timely technical assistance.

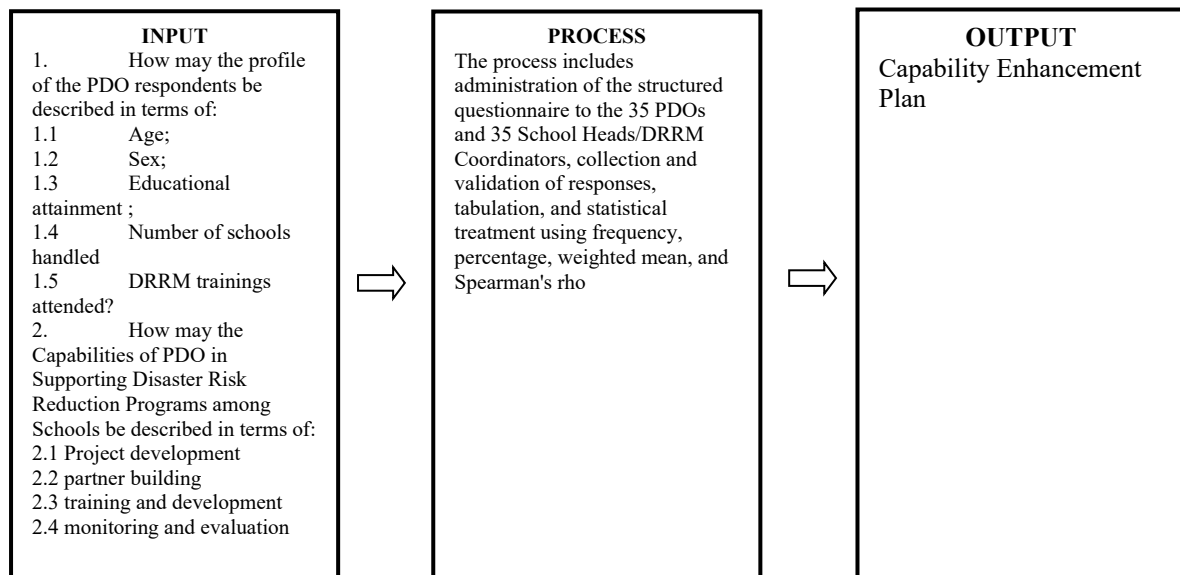
2. Paradigm of the Study

Figure 1 presents the Conceptual Framework using the Input–Process–Output (IPO) model. The framework is aligned with the Statement of the Problem and shows how the respondents' profile and the five capability dimensions serve as inputs, how the data are gathered and analysed as the process, and how the findings and Capability Enhancement Plan constitute the output.

Input. The input consists of the PDO respondents' profile—age, sex, educational attainment, number of schools handled, and DRRM trainings attended—and the five capability dimensions: Project Development, Partner Building, Training and Development, Monitoring and Evaluation, and Documentation and Report.

Process. The process includes administration of the structured questionnaire to the 35 PDOs and 35 School Heads/DRRM Coordinators, collection and validation of responses, tabulation, and statistical treatment using frequency, percentage, weighted mean, and Spearman's rho.

Output. The output consists of the assessed capabilities of PDOs, the significant relationships and interrelationships identified from the data, and the proposed Capability Enhancement Plan designed to strengthen PDO support to school heads and DRRM Coordinators in school-based DRRM activities.



Acknowledgements

The researcher would like to express his profound gratitude to the following persons whose assistance, encouragement, and support made this study possible.

To his adviser, Dr. Edwin L. Mirano, for his invaluable assistance, untiring effort, and constructive feedback that significantly contributed to the completion of this manuscript;

To Dean Emily Lim- Garcia, Graduate School, PHINMA Araullo University, for his encouragement, concern, and advice;

To the other members of the pre- and oral defense committee headed by Dean Emily Lim-Garcia, Dr. Lulu Diamante, Dr. Dante G. Parungao, Dr. Donabel M. Germino, and Dr. Ceasar C. Lopez, for their scholarly suggestions, comments, and concern that inspired the researcher to make it to the fullest;

To 35 Project Development Officer I and 35 School Heads of the PDO I's of Division of Nueva Ecija, who served as respondents for giving their honest answers and for giving their time to interview to data gathering instruments to the respondents;

To his brothers Julius Ceasar D. Lores and James Anthony D. Lores, for their consistent support and encouragement, moral and spiritual support during those depressing moments;

To his best friends, Aaron Jhay Cabrera, Mae Ann Carlos, Gizelle Cyna Pineda, Lhirna Mae Campos, Ali Mae Santamaria, and Mark Rafael Campos, for their undying support and encouragement;

To his uncle, Eduardo M. Lores, for their undying support and encouragement;

To Fe D. Lores and Cesar M. Lores, the researcher's parents, for their unconditional love, wholehearted support, and inspiring thoughts that greatly strengthened the researcher in finishing this study;

Above all, to the Almighty God for his continuous blessings and guidance through all the trials that she'd been through. He is the reason for her existence, and she is nothing without him. Truly, He proves that nothing is impossible if you call his name.

References

- Acuevas, K. B. (2016). *Assessment of the implementation on the effectiveness of the disaster preparedness activity of the DRRM in the municipality of Valencia City, Bukidnon, Philippines*. Academia.
<https://pdfs.semanticscholar.org/4d2c/066a49ff66147252c04a07bed76d26cacb88.pdf>
- Aghaei, N., Seyedin, H. & Sanaeinasab, H. (2018). *Strategies for disaster risk reduction education: A systematic review Educ Health Promote*.
https://dx.doi.org/10.4103%2Fjehp.jehp_31_18
- Akbar, Z., Widana, I. K., & Hidayat, R. (2022). *Capacity building and disaster preparedness among educational institutions: A systematic review*. International Journal of Disaster Risk Reduction, 76, 103020.
- Apronti, P. T., Osamu, S., Otsuki, K., & Kranjac-Berisavljevic, G. (2017). *Education for disaster risk reduction (DRR): linking theory with practice in Ghana's basic schools*. Sustainability, 7(7), 9160- 9186.
<https://www.mdpi.com/2071-1050/7/7/9160>
- Astutil, N. M. W., Werdhiana, I. K., & Wahyono, U. (2021). *Impacts of direct disaster experience on*

teachers' knowledge, attitudes and perceptions of disaster risk reduction curriculum implementation in Central Sulawesi, Indonesia. International Journal of Disaster Risk Reduction, 53, 101992.
<https://www.sciencedirect.com/science/article/abs/pii/S221242092031494>

- Baluran, A.G.S (2023). "The Level of Disaster Risk Reduction and Management (DRRM) Program Implementation Among Public Elementary Schools: Basis for a Proposed 'Our School, Our Safe Zone' Program" European Journal of Education Studies, ISSN-L:- 2501-1111.
<https://oapub.org/edu/index.php/ejes/article/view/4859/7494>
- Bello, N. R. (2020). Disaster preparedness of schools in region 8, Philippines after super typhoon Haiyan. International Journal of Advanced Research and Publications, 4(2).
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3791093
- Bronfinan, N. C., Cisternas, P. C., Repetto, P. B., & Castañeda, J. V. (2019). Natural disaster preparedness in a multi-hazard environment: Characterizing the sociodemographic profile of those better (worse) prepared. PloS one, 14(4), e0214249.
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0214249>
- Chacko, S., Randolph, R., & Morsch, G. (2019). Disaster medicine: Public health preparedness for natural disasters. FP essentials, 487, 17-22.
<https://europepmc.org/article/med/31799816>
- Comighud, S. (2018). Implementation of the public schools' disaster risk reduction management program and level of capabilities to respond. International Journal of Science and Research (IJSR) 9(4):752.
<http://dx.doi.org/10.21275/SR20404215026>
- Cubillas, A. U. (2018). The implementation of the school disaster risk reduction and management program components of the disaster-prone elementary schools. International Journal of Current Research, 10(11), 75309-75314.
<https://doi.org/10.24941/ijcr.32904.11.2018>
- Cvetković, V. M., Öcal, A., & Ivanov, A. (2023). Disaster preparedness education and institutional resilience in schools: A global review. Sustainability, 15(8), 6674.
- Dariagan, J. D., Atando, R. B., & Asis, J. L. B. (2021). Disaster preparedness of local governments in Panay I island, Philippines. Natural hazards, 105(2), 1923- 1944.
- Delicado, A., Rowland, J., Fonseca, S., de Almeida, A. N., Schmidt, L., & Ribeiro, A. S. (2017). Children in disaster risk reduction in Portugal: Policies, education, and (non) participation. International Journal of Disaster Risk Science, 8(3), 246-257.
<https://link.springer.com/article/10.1007/s13753-017-0138-5>
- Delorino, J. P. (2019). Level of implementation of disaster risk reduction and management program in Catarman, Northern Samar. SSRG International Journal of Economics and Management Studies 6(3), 95-98. DOI: 10.14445/23939125/IJEMS-V6I3P111
- Department of Education. (2011). Disaster Risk Reduction and Management Office (DRRMO) manual. Department of Education.
- Department of Education. (2021). Comprehensive Disaster Risk Reduction and Management in Education Framework. Department of Education.
- Department of Education. (2022). Basic Education Development Plan 2030. Department of Education.
- Department of Education. (2024). National School Calendar and Activities and Disaster Preparedness Guidelines. Department of Education.
- Diaz, J. D., Gapasangta, D., Carandang, P. D., & Samonte, C. (2019). Local disaster risk reduction management system utilizing unmanned aerial vehicles. ResearchGate.

- Etikan, I., Musa, S. & Alkassim R. (2016). *Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics*. Vol. 5, No. 1, 2016, pp. 1-4. doi: 10.11648/j.ajtas.20160501.11
- Faustino, M., Napao, K., Anas, J. Fulgencio, A., Alvaro, A., et al. (2019). *Implementation of disaster risk reduction management: A basis for an enhanced program*. International Journal of Education and Research, 7(9). <https://research.buksu.edu.ph/index.php?journal=APJSBS&page=article&op=view&path%5B%5D=231>
- Ferrer, L. J., De Torres, M., & Vargas, D. (2021). *Communication strategies and disaster risk reduction management*. Available at SSRN 3791093. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3791093
- Goniewicz, K., & Burkle, F. M. (2019). *Challenges in implementing Sendai framework for disaster risk reduction in Poland*. International Journal of Environmental Research and Public Health, 16(14), 2574. <https://www.mdpi.com/1660-4601/16/14/2574>
- Kanyasan, K., Nonaka, D., Chatouphonexay, A., Hernandez, P. M., Kounnavong, S., & Kobayashi, J. (2018). *Implementation of disaster risk reduction and management policies in a school setting in Lao PDR: a case study*. Tropical Medicine and Health, 46(1), 1-12.
- Kusumastuti, R. D., Arviansyah, A., Nurmala, N., & Wibowo, S. S. (2021). *Knowledge management and natural disaster preparedness: A systematic literature review and a case study of East Lombok, Indonesia*. International Journal of Disaster Risk Reduction, 58, 102223. <https://www.sciencedirect.com/science/article/abs/pii/S221242092100189.8>
- Latupeirisa, V. P. S. (2020). *Level of earthquake disaster preparedness and its integrity in natural science learning: A literature review*. In Journal of Physics: Conference Series (Vol. 1440, No. 1, p. 012093). IOP Publishing. <https://iopscience.iop.org/article/10.1088/1742-6596/1440/1/012093/meta>
- Mamhot, K. (2019). *Extent of implementation of disaster risk reduction management and stakeholders' participation*. Foundation University, Dumaguete City, Philippines. <https://scholar.google.com/>
- Maminta, L. G. (2019, November). *Level of awareness on disaster preparedness*. In Journal of Physics: Conference Series (Vol. 1254, No. 1, p. 012015). IOP Publishing.
- Matsuura, S., & Razak, K. A. (2019). *Exploring transdisciplinary approaches to facilitate disaster risk reduction*. Disaster Prevention and Management: An International Journal.
- Munsaka, E., & Dube, E. (2018). *The contribution of indigenous knowledge to disaster risk reduction activities in Zimbabwe: A big call to practitioners*. Jambá: Journal of Disaster Risk Studies, 10(1), 1-8. <https://journals.co.za/doi/abs/10.4102/jamba.v10i1.493>
- Murti, R., & Mathez-Stiefel, S. L. (2019). *Social learning approaches for ecosystem-based disaster risk reduction*. International Journal of Disaster Risk Reduction, 33, 433-440.
- Mwangi, P. K. (2019). *Factors influencing implementation of fire disaster risk reduction in public secondary schools in Nyandarua South District, Kenya (Doctoral dissertation)*. <http://erepository.uonbi.ac.ke/handle/11295/74082>
- National Disaster Risk Reduction and Management Council. (2022). *National Disaster Risk Reduction and Management Plan (2022–2030)*. NDRRMC.
- Nurdin, N., Rafliana, I., Hidayati, S., Oktari, R. S., & Djalante, R. (2017). *Integrating disaster risk reduction and climate change adaptation into school curricula: From national policy to local implementation*. In Disaster Risk Reduction in Indonesia (pp. 213-234). Springer, Cham.

- Parcon, R. M. L. C. (2017). *Towards an inclusive disaster risk reduction management process*.
<https://www.think-asia.org/handle/11540/7262>
- Pascapurnama, D. N., Murakami, A., Chagan-Yasutan, H., Hattori, T., Sasaki, H., & Egawa, S. (2018). *Integrated health education in disaster risk reduction: Lesson learned from disease outbreak following natural disasters in Indonesia*. *International Journal of Disaster Risk Reduction*, 29, 94-102.
<https://www.sciencedirect.com/science/article/pii/S2212420917301383>
- Phelan, A. L., Katz, R., & Gostin, L. O. (2020). *The novel coronavirus originating in Wuhan, China: challenges for global health governance*. *Jama*, 323(8), 709-710.
- Republic of the Philippines. (2010). *Republic Act No. 10121: Philippine Disaster Risk Reduction and Management Act of 2010*. Official Gazette.
- Ronan, K. R., Haynes, K., Towers, B., Alisic, E., Ireland, N., Amri, A., ... & Petal, M. (2016). *Child-centred disaster risk reduction: can disaster resilience programs reduce risk and increase the resilience of children and households?*. *Australian Journal of Emergency Management*, The, 31(3), 49-58.
- Saique, D. G. (2018). *PW 0137 Community-based disaster risk reduction management*. *Injury Prevention*, 24 (Suppl 2), A197.
<https://www.proquest.com/openview/4b2f0dc0000b27c99bce4f835b286278/1?pqorigsite=gscholar&cbl=2041067>
- Sakurai, A., & Sato, T. (2016). *Promoting education for disaster resilience and the Sendai framework for disaster risk reduction*. *Journal of Disaster Research*, 11(3), 402-412.
- Salita, C., Tiongco, R.E. & Kawano, R. (2020) *Assessment of school teachers' disaster preparedness using the extended parallel process model: a cross-sectional study in Angeles City, Philippines*. *J Public Health (Berl.)*
<https://doi.org/10.1007/s10389-020-01237-8>
- Shah, A. A., Gong, Z., Pal, I., Sun, R., Ullah, W., & Wani, G. F. (2020). *Disaster risk management insight on school emergency preparedness—a case study of Khyber Pakhtunkhwa, Pakistan*. *International Journal of Disaster Risk Reduction*, 51, 101805.
<https://www.sciencedirect.com/science/article/abs/pii/S221242092031307>
- Shiwaku, K., & Shaw, R. (2021). *School disaster risk reduction for sustainable development: Recent trends and future directions*. *International Journal of Disaster Risk Science*, 12(4), 451–463.
- Shrestha, S., & Pathak, S. (2024). *Capacity development and disaster preparedness among educational institutions*. *International Journal of Disaster Risk Reduction*, 98, 104214.
- Suk, J. E., Vaughan, E. C., Cook, R. G., & Semenza, J. C. (2020). *Natural disasters and infectious disease in Europe: a literature review to identify cascading risk pathways*. *European Journal of Public Health*, 30(5), 928-935.
<https://academic.oup.com/eurpub/article/30/5/928/55120>
- Sumbillo Jr, L. Z., & Madrigal, D. V. (2020). *Disaster risk reduction management practices of Augustinian Recollect Schools in Negros Island*. *Philippine Social Science Journal*, 3(2), 135-136.
https://www.researchgate.net/profile/DvMadrigal/publication/346192923_Disaster_Risk_Reduction_Management_Practices_of_Augustinian_Recollect_Schools_in_Negros_Island/links/5fbcdb34299bf104cf6ea7b8/Disaster-Risk-Reduction-Management-Practices-of-Augustinian-Recollect-Schools-in-Negros-Island.pdf
- Towers, B., Haynes, K., Sewell, F., Bailie, H., & Cross, D. (2017). *Child-centred disaster risk reduction in Australia: progress, gaps and opportunities*. *Australian Journal of Emergency Management*, The, 29(1), 31-38.

- Tuladhar, G., Yatabe, R., Dahal, R. K., & Bhandary, N. P. (2017). *Disaster risk reduction knowledge of local people in Nepal*. *Geoenviron Disast* 2 (1).
[https://geoenvironmentaldisasters.springeropen.com/art](https://geoenvironmentaldisasters.springeropen.com/articles/10.1186/s40677-014-0011-4) icles/10.1186/s40677-014-0011-4
- Turpin, S. M. (2019). DeciTurpin, SM, & Marais, MA (2004). *Decision-making: Theory and practice*. ORiON, 20(2), 143.
- United Nations Children's Fund. (2022). *Learning continuity in emergencies and crises: Global guidance for education systems*. UNICEF.
- United Nations Educational, Scientific and Cultural Organization. (2021). *Reimagining our futures together: A new social contract for education*. UNESCO.
- United Nations Office for Disaster Risk Reduction. (2022). *Global assessment report on disaster risk reduction 2022: Our world at risk—Transforming governance for a resilient future*. United Nations.
- United Nations Office for Disaster Risk Reduction. (2023). *Words into action guidelines: National disaster risk assessment*. United Nations.\
- Van der Kroef, J. M. (2020). *Patterns of cultural conflict in Philippine life*. *Pacific Affairs*, 326-338.
<https://www.jstor.org/stable/2754276>
- World Bank. (2022). *Building resilient education systems: Lessons from disaster and climate resilience*. World Bank.
- Wu, X., & Guo, J. (2021). *Disaster probability, optimal government expenditure for disaster prevention and mitigation, and expected economic growth*. In *Economic Impacts and Emergency Management of Disasters in China* (pp. 3- 44). Springer, Singapore.

Appendix A. Questionnaire

The study will be conducted to identify the Capabilities of PDO in Supporting Disaster Risk Reduction Management Programs among Schools. Please answer by checking (/) or filling in the blank.

PART I

(PERSONAL PROFILE)

Age : _____
 Sex : _____ Male _____ Female
 Educational Attainment _____
 Number of schools handled _____
 Training attended related to DRRM _____

PART II

Capabilities of Project Development Officer I in Supporting Disaster Risk Reduction Management Program Capability Among Schools

Direction. Please rate the capabilities of the Project Development Officers in supporting Disaster Risk Reduction and Management Program Capability among Schools using the following scale.

4 – Highly Capable

3 – Capable

2 – Moderately Capable

1 – Less Capable

Project development	4	3	2	1
Assist the school heads in...				
1. Reviewing existing plans, policies and standards.				
2. Developing/enhancing and disseminate risk-informed plans, policies, and standards for capability.				
3. Identifying areas for partnerships with external partners on DRRM, CCA and EiE programs				
4. Establishing a regular coordination mechanism among external and internal partners				
5. Establishing expertise and best practices among external and internal partners				
6. Coordinating the preparation and distribution of materials and interventions for disaster preparedness, response, and recovery.				
7. Identifying areas for partnerships with relevant DepEd offices in connection with DRRM, CCA, and EiE.				
8. Creating uniform templates to accommodate the required data and provide feedback to the different DepEd offices and partners.				
9. Establishing a regular sharing and tracking information among external and internal partners.				
10. Analyzing historical hazards data and official hazard maps to identify possible policies and programs in vulnerable areas.				

Partner Building	4	3	2	1
Helps school heads in...				
1. Encouraging public and private groups to learn about the benefits of working together in disaster risk reduction.				
2. Encouraging organizations to work together and share information to achieve common goals and use their resources effectively.				
3. Encouraging organizations to work together in creating solutions for disaster risk reduction through sharing information and ideas.				
4. Encouraging organizations to build trust and communicate openly to strengthen collaboration and partnerships.				
5. Encouraging organizations to work with communities and stakeholders to understand their needs and share the benefits of partnerships				
6. Recognizing and promoting successful partnerships in disaster risk reduction to inspire others to do the same.				
7. Encouraging schools to coordinate local government in identifying risk prone				

areas in school				
8. Encouraging schools in coordinating LGU in possible class suspension during typhoon and other alike				
9. Fostering acknowledgement among local partners who contributed much in risk reduction of schools				
10. Establishing of one-way communication among schools and local partners				

Training and Development	4	3	2	1
1. Aid in training teachers in emergency response				
2. Assist in empowering school heads and DRRM coordinators in preparing school DRRM plans				
3. Help trained the members technically to administer and coordinate post-disaster relief and rehabilitation.				
4. Helped in facilitating immediate resumption of classes to track learners.				
5. Assist in coordinating with NGOs, GOs, and local and foreign agencies for rehabilitation assistance when needed.				
6. Help in establishing training calendar or roadmap for continuous learning on DRRM innovations, climate adaptation and resilience education				
7. Assist in monitoring interventions on school rehabilitation and school recovery.				
8. Assist in identifying Temporary Learning Spaces and other modes of teaching.				
9. Help in educating and training teachers in assisting stakeholders in time of disaster.				
10. Help in tapping communities for food and volunteer rehabilitation services.				

Monitoring and Evaluation	4	3	2	1
1. Assist in monitoring the execution of school-based risk reduction projects/ plans and drills				
2. Help in ensuring compliance with DepEd order No 50 s 2011 and RA 10121 (DRRM act)				
3. Assist in gathering report on school vulnerabilities				
4. Helped in monitor school incidents and ensure school updates their school hazards and maps				
5. Help in monitoring activities like simulation drills, evacuation protocols and safety audits				
6. Assist in ensuring proper allocation of school MOOE for DRRM activities				
7. Providing support in preparing spending reports to ensure consistency with approved plans.				
8. Help in assessing whether the schools have working early warning				

system (EWS) a				
9. Assist in monitor coordination protocols with local DRRM office and barangays				
10.Help in evaluating how DRRM activities improved school safety and preparedness				

Documentation and Report	4	3	2	1
1. Help in making detailed records of school disaster risk activities				
2. Assist in disaster incidence report the PDO has accurate school damage, affected learners/staff and response effort				
3. Help in recording attendance in trainings				
4. Help in keeping copies of fund utilization reports procurement of emergency kits and others				
5. Assist in preparing of periodic report in school risk management				
6. Help in consolidating reports from teachers or committees involved in DRRM activities.				
7. Assist in maintaining an organized filing system for DRRM documents, photos, and records.				
8. Help in preparing summary reports for submission to higher offices or the division DRRM coordinator.				
9. Support in validating and updating DRRM-related data and statistics of the school.				
10.Assist in documenting best practices and lessons learned from DRRM activities for future reference.				