

Exploring the Role of Education in Shaping Disaster Preparedness: Phenomenological Lens

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Abstract: Disaster preparedness education is essential in building resilient communities, especially in disaster-prone countries like the Philippines. Despite national policies such as DepEd Order No. 21, s. 2015, the actual classroom implementation of disaster risk reduction (DRR) remains inconsistent. This study explores the lived experiences of 10 junior high school teachers in integrating disaster preparedness into their teaching practices, focusing on the challenges they face, the coping mechanisms they employ, and the insights they gain. The study used a qualitative research design anchored in phenomenology. In-depth interviews were conducted with purposively selected junior high school teachers who had experience in integrating DRR topics into their lessons. Thematic analysis was applied, and triangulation was used to ensure trustworthiness in the findings. Findings revealed that while teachers are committed to teaching disaster preparedness, they encounter challenges such as lack of training, overcrowded curricula, and weak policy implementation. To address these, teachers employed coping strategies such as self-directed learning, curriculum integration, and peer collaboration. Insights from the study show that effective integration occurs when DRR is contextually and subject-aligned, and when school-level initiatives compensate for policy gaps. Implications point toward improving training, resources, and monitoring systems, while future directions encourage stakeholder collaboration to sustain disaster education in schools.

Keywords: Disaster Preparedness, Education, Junior High School, Teacher Experiences, DRR Integration, Phenomenology, Curriculum, Coping Strategies.

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I. INTRODUCTION

This study examined how junior high school teachers integrate disaster preparedness education into their teaching, highlighting the important role they play in promoting safety and resilience among students. It also explored the challenges and opportunities teachers encounter while embedding disaster preparedness in the curriculum to develop a well-prepared student body.

The United Nations stresses the importance of disaster risk reduction (DRR) education in schools, but its implementation varies due to resource and policy differences worldwide. While countries like Japan have strong programs, challenges remain, especially in rural areas and regions with overloaded curricula. In the Philippines, DRR education is included in policy but faces uneven execution because of limited teacher training, resources, and support. Similarly, in Davao, local teachers struggle with relevant materials and training, leading to inconsistent disaster preparedness across schools and highlighting the need for stronger, more consistent support.

Despite widespread recognition of the importance of disaster preparedness education globally, nationally, and locally, its integration into school curricula remained inconsistent and challenging. This study investigated how junior high school teachers incorporated disaster

preparedness into their teaching and the obstacles they faced, aiming to inform better strategies and policies for effective disaster education in schools.

This study aimed to explore how junior high school teachers integrated disaster preparedness into their teaching, focusing on their experiences, strategies, and challenges. It examined how teachers incorporated disaster risk reduction within the existing curriculum and identified the support needed to better prepare students. The findings are intended to guide educational policies and practices to develop stronger disaster preparedness programs that promote a culture of safety and resilience in schools.

Disaster preparedness education is increasingly seen as essential for building student resilience, with a focus on integrating disaster risk reduction (DRR) across various subjects through interactive methods like simulations and digital tools. Despite its importance, challenges such as limited teacher training, scarce resources, and crowded curricula hinder effective implementation. Research calls for strong policies, school-community partnerships, and child-centered approaches that empower students to engage actively in disaster preparedness, suggesting that a comprehensive, participatory strategy leads to more lasting and meaningful outcomes.

This study used Ajzen's (1991) Theory of Planned Behavior (TPB) to understand how junior high school teachers integrated disaster preparedness education. TPB explained that teachers' intentions were influenced by their attitudes toward the importance of disaster education, the social pressures or norms from colleagues and policies like DepEd Order No. 21, s. 2015, and their perceived control over implementing the education despite challenges. Teachers with positive attitudes, strong support from their environment, and confidence in their abilities were more likely to effectively incorporate disaster preparedness into their teaching. Using TPB helped reveal the motivations and barriers teachers faced, guiding strategies to better support disaster resilience education in schools.

➤ Method

This study used a qualitative phenomenological research design to explore teachers' lived experiences and perceptions of integrating disaster preparedness into school curricula. Phenomenology was chosen for its focus on understanding the essence of participants' experiences, capturing how educators perceive and implement disaster risk reduction education in their classrooms. Through in-depth interviews, the study aimed to reveal the complex, context-specific challenges and opportunities teachers faced, providing rich insights to inform educational policy and practice.

This study was grounded in four philosophical assumptions—ontology, epistemology, axiology, and methodology—that guided its approach to exploring teachers' integration of disaster preparedness in school curricula. It adopted a constructivist ontology, recognizing multiple subjective realities shaped by individual and cultural contexts. The interpretivist epistemology emphasized co-constructed knowledge through interaction with participants, focusing on their lived experiences and meanings. Axiology highlighted the importance of ethical considerations and researcher reflexivity, valuing participants' perspectives. Methodologically, the study used qualitative methods like semi-structured interviews and thematic analysis to capture the nuanced, context-specific experiences of teachers, aiming for a deep, textured understanding rather than broad generalization.

The researcher's qualitative approach aligned with an interpretivist paradigm, emphasizing that understanding is co-created through interaction with participants. This study recognized that integrating disaster preparedness education is a complex, context-dependent process shaped by factors like school culture, teacher expertise, and community involvement.

The study involved 10 junior high school teachers from Alegria Integrated School in San Antonio, Cateel, Davao Oriental, selected through purposive sampling to ensure relevant experience with disaster risk reduction (DRR) education. Participants were full-time teachers with at least two years of experience who had integrated disaster preparedness into their lessons and were willing to engage in in-depth interviews.

The study used a semi-structured interview guide with open-ended questions to explore junior high school teachers' experiences integrating disaster preparedness into their teaching. The guide focused on challenges, coping strategies, and insights, allowing for follow-up questions to gain deeper understanding. Questions were clear and validated by experts.

Data were collected through one-on-one in-depth interviews with purposively selected junior high school teachers experienced in disaster preparedness education. Interviews, lasting 20-30 minutes, were conducted face-to-face or online, following a semi-structured guide. Participants provided informed consent, and sessions were audio-recorded with permission.

The researcher analyzed the data using a thematic analysis approach, starting with familiarization by repeatedly reviewing recordings and transcripts. Triangulation was applied to ensure credibility by cross-checking multiple data sources. Next, open coding was done to label meaningful segments, followed by grouping codes into broader themes. Themes were reviewed and refined to capture data richness and aligned with the study's objectives and framework. Finally, the findings were written up using participant quotes to support themes, with triangulation ensuring a well-rounded and credible interpretation.

II. RESULTS AND DISCUSSIONS

The study found that junior high school teachers showed strong commitment to integrating disaster preparedness education, supported by engaged students, flexible administrators, and collaborations with experts. However, they faced challenges such as limited training, lack of tailored resources, an overcrowded curriculum, and weak policy enforcement at the school level.

The study found that junior high school teachers coped with challenges in teaching disaster preparedness by seeking self-directed learning through online resources and external agencies. They integrated disaster risk reduction into existing subjects to manage limited curriculum time and collaborated with colleagues to organize activities and share materials.

Teachers realized they are willing to integrate disaster preparedness into their teaching but need more support in training, resources, and guidance. They found that DRR education is most effective when linked to local contexts and relevant subjects. Despite weak policy implementation, school-based initiatives and collaborations help sustain disaster education, showing that meaningful progress can come from teacher and school efforts even amid systemic challenges.

The study found that junior high school teachers are committed to integrating disaster preparedness education, motivated by personal beliefs and community relevance. They received support from school leaders, and students engaged more when lessons related to recent or local disasters. Practical activities like drills and expert talks enriched learning, but teachers faced challenges such as

limited training, resources, a crowded curriculum, and weak policy enforcement.

To cope, teachers used self-directed learning through online resources, integrated disaster topics into regular subjects, and organized school-based activities with peers. These strategies helped them continue teaching disaster preparedness despite limited formal support.

Teachers emphasized the need for stronger institutional backing and noted that lessons are most effective when connected to local contexts and subjects. School-led initiatives played a key role in filling gaps left by national policies, highlighting the importance of flexible, localized, and collaborative approaches to disaster education.

The findings show that while teachers are motivated to teach disaster preparedness, systemic barriers like inadequate training, limited resources, and crowded curricula must be addressed. The Department of Education and school leaders should integrate disaster risk reduction (DRR) as an essential life skill within core subjects.

Teachers' coping strategies reveal the need for flexibility and collaboration, but relying on informal efforts risks inconsistent implementation. Structured support such as school-based DRR programs, peer learning, and clear guidelines are needed to ensure quality and consistency.

The Department of Education should integrate disaster preparedness into core learning competencies, provide standardized materials, regular teacher training, and clear guidelines, while strengthening policy enforcement and coordination with local DRRM offices. School leaders must support this by offering scheduling flexibility, organizing drills, fostering partnerships, and ensuring staff readiness. Teachers should use creative, localized methods, collaborate through DRR committees, and seek professional development. Students should be active participants and peer educators to build confidence and community responsibility. Future research could include perspectives from students, parents, and administrators, compare different schools, and examine long-term impacts of disaster education.

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