

Learners' Disaster Preparedness at Mahay Integrated Secondary School

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Abstract: *The study aimed to determine the learners' disaster preparedness of Grade 10 students of Mahay Integrated Secondary School, Butuan City, Agusan Del Norte. A descriptive research design was utilized to solicit the views of the learners where data was obtained through a survey questionnaire. It reveals that both male and female participants were equally distributed and it was found out that all participants were regular students and no transferees from other schools, and lastly, their age group was in the range of 15 to 17 years old. Participants were fully aware and very much knowledgeable about disaster risk reduction since it is implemented in their school and identified hazard places near their area. And it is indicated that they had been taught about disaster preparedness education in the classrooms and reiterated that emergency drills were performed at their school. Hence, it is encouraged that the school shall continue promoting a safe environment for students and teachers through an information drive.*

Keywords: *Disasters, preparedness, learners, risk reduction, hazard*

1.0 Introduction

The idea of disaster preparedness is essential for people who are involved in disasters when a rapid and effective response is necessary during an actual emergency. This activity is frequently contingent on having developed and implemented preparation strategies. Lives may be lost unnecessarily if necessary, if action is not taken or if the reaction is delayed. Disaster preparedness involves identifying organizational resources, determining roles and responsibilities, developing policies and procedures, and engaging in preparedness activities aimed at ensuring timely disaster preparation and effective emergency response. Instead of being a particular sectorial activity, disaster preparedness is a continuous and coordinated process resulting from various actions and resources. It includes contributions from a variety of areas, ranging from training and logistics to health care and institutional development.

As already stated, disaster preparedness is a wide term that represents a series of procedures that minimizes the negative impacts of a hazard, such as loss of life, property, and disruption of livelihoods. Disaster preparedness is achieved in part through readiness measures that speed disaster response, rehabilitation, and recovery, resulting in quick, targeted assistance. And this study is to teach students how to be more prepared for unexpected disasters where preparedness is essential in securing the right to life with dignity. It is also done through community-based processes and methods that increase people's and communities' capacities to cope with and reduce the consequences of disasters on their lives. The students were necessary to know this to strengthen their capacities to prepare for and manage the consequences of various risks.

The school as an educational institution has the responsibility to deliver education. Schools must plan and commit to making effort to create a conducive learning atmosphere and process to enable the students to develop their potential actively, and to express religion and spirituality, self-control, personality, intelligence, good morals, and skills needed for themselves, their communities, and country. Of this, the school still gains trust as an effective institution to build a culture of disaster preparedness in societies, particularly among students, teachers, education practitioners, and other stakeholders as well as the public.

School is one of the communities affected by the disaster in which that should have an organized educational organization. Disaster came at an unexpected time, so the school is tasked to ensure the safety and healthy environment for their students. When they encounter disasters, students are among the most vulnerable groups that are affected specifically those who attend classes. Disasters do not recognize age; therefore, students are as susceptible to suffering from disaster-damaging results as adults. They are more vulnerable, in the sense of having less capacity to cope with disasters than adults.

Disaster preparedness is an important matter to be learned by the students as well as teachers that's why the researchers mainly have an interest in conducting the study.

Department of Education (DepEd), schools are required to create a healthier environment for school kids, and to generate a strong interest in achieving better educational results. We also take the lead in training individuals to become disaster risk management experts, and so disaster risk reduction programs and curricula need to be mainstreamed across all levels of the curriculum. And as part of education for sustainable development, preparing the education system includes conducting a multi-hazard risk assessment, drafting plans and policies to address threats, and implementing those plans sustainably.

Statement of the Problem

This study aimed to determine the level of learners' disaster preparedness in Mahay, Integrated Secondary School, Mahay, Butuan City, Agusan Del Norte.

It sought to answer the following questions:

1. What is the profile of the participants in terms of:
 - 1.1 gender,
 - 1.2 type of school,
 - 1.3 number of years in school, and
 - 1.4 age group of participants?
2. What is the learner's knowledge of disaster risk reduction?
3. What is the learner's disaster preparedness?
4. Based on the findings of the study, what intervention program may be crafted?

Theoretical and Conceptual Framework of the Study

Figure 1 introduces a schematic diagram that shows the learner's level of knowledge of disaster preparedness. Including the profiling of the learners and lastly, the programs they have undergone to be ready for any disasters that may come. The schematic diagram was designed to explore the three main dimensions; what is the profile of the participants in terms of gender, type of school, number of years in school and age group of participants, what is the learner's level of knowledge in disaster risk reduction in terms of the place where they heard the word disaster, type of disaster that can happen in our country and learner's level of disaster preparedness.

Schematic Diagram of the Study

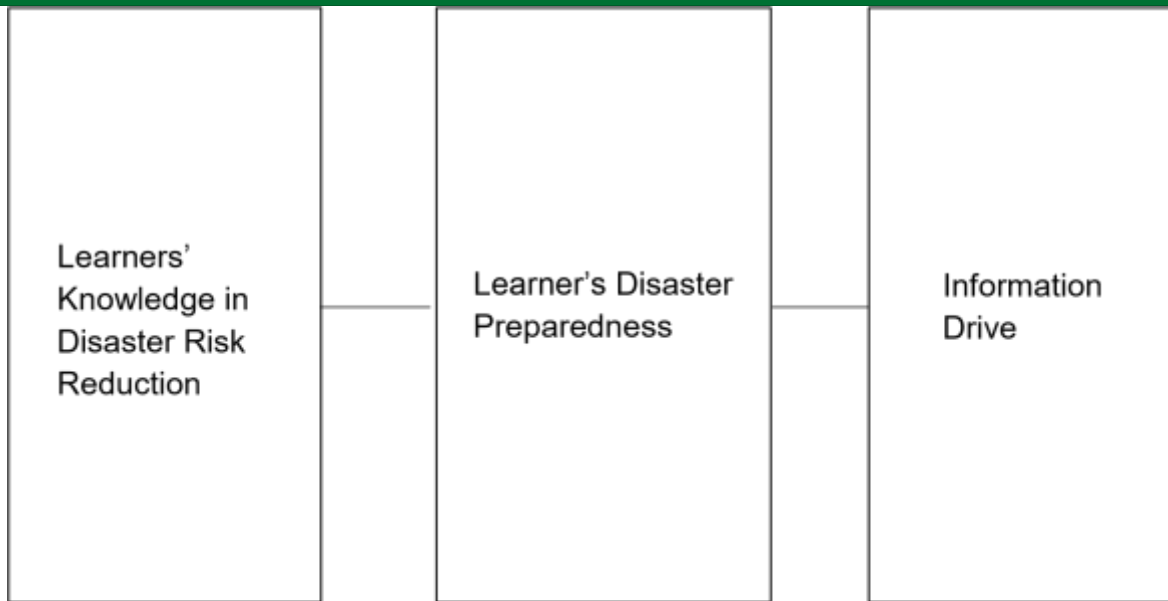


Figure1. Schematic diagram of the study

2.0 Methodology

The researchers used a quantitative research design to assess the students who had been surveyed and interviewed in which their responses were then collected. Through this design, the researchers were able to observe the respondents towards "Learners disaster preparedness of Mahay, Integrated Secondary School" without attempting to change any behavior or conditions.

Data was gathered from primary and secondary sources. Primary data was gathered with the aid of questionnaires and an interview process. A literature review of relevant sources of information about the research problem and research questions was conducted as secondary data.

The study was conducted in Mahay Integrated Secondary School (MISS) Butuan City, Agusan Del Norte. It is approximately 2 kilometers away from the Agusan River and 100 meters away from the Mahay River.

The participants of the study were the Grade 10 students of Mahay Integrated Secondary School, Mahay, Butuan City, Agusan Del Norte during the Academic Year 2021 – 2022.

The study utilized a purposive random sampling design wherein the researchers set 50% of the population of Grade 10 students in Mahay Integrated Secondary School to be selected randomly. Purposive sampling (also known as judgment, selective or subjective sampling) is a sampling technique in which the researcher relies on his or her judgment when choosing members of the population to participate in the study.

The researchers adopted the validated survey questionnaire from Mamogale (2011) to gather the data and information needed. The questionnaire adopted by the researcher aimed to explore the three main dimensions; what is the profile of the participants, what is the learner's level of knowledge in disaster risk reduction disaster, and the learner's level of disaster preparedness.

The researchers obtained permission to conduct the study from the Office of the Principal of Mahay Integrated Secondary School, Mahay Butuan City. Upon approval, the researchers used a survey questionnaire to randomly selected Grade ten students to

answer all the questions about the topic "Learners disaster preparedness". Health protocols are followed during the face-to-face survey.

The data collected were tabulated and treated accordingly to the problems presented in this study. Percentage distribution, mean, and frequency were used in determining the Learner's Disaster Preparedness at Mahay Integrated Secondary School.

The percentage was used to determine the ratio of respondents that have the same answer as the general number of participants. Frequency is used to determine the number of respondents who answered with the general number of participants.

The researchers used the same survey questionnaire that was used in the study "Assessing Disaster Preparedness of Learners and Educators in Soshangueve North Schools" as a research instrument, authored by Mamogale (2011). The questionnaire was validated and underwent pilot testing.

3.0 Results and Discussion

The chapter starts by discussing the profile of the participants and then giving closing arguments to indicate a connection with the research questions.

Problem 1: What is the profile of the participants in terms of:

1.1 gender;

1.2 type of school;

1.3 number of years in school; and

1.4 age group of participants?

Figure 3 shows the profile of the participants. It reveals that both males and females participants were equally distributed among a total of 22 students of Grade 10 of Mahay Integrated Secondary School, and it was found out that all participants were regular students of the said school and no transferees from other schools, and lastly, their age group was in the range 15 – 17 years old.

Problem 2: What is the learner's knowledge of disaster risk reduction?

The results shown in figure 4 indicate that all participants were fully aware of the word "hazard" and what it means in terms of disaster-related terminology. They were mostly aware that the place or school place are in danger of any possible calamity.

According to Katie Martinelli (2018) the word "hazard" is used often to describe dangers in the workplace. Hazards are anything that can cause harm, damage, or adverse health effects to people in the workplace.

The figure also presents results that show that 72.73% of learners indicated that they had learned about hazards at school. 27.27% of learners learned about hazards at home and there are no indications that had learned about hazards from hospitals and others.

Figure 4 shows that 100% of the learners who participated in the study learned about the word "disaster". Disaster, as it is reflected in its origin, had been historically interpreted and used as a massive and sudden calamity due to the unfavorable position of a planet or star, implying "impossible to control," because it is caused by God's will (Etkin 2015).

Also figure 4 revealed the places where learners heard about the concept of the word “disaster”. About two-thirds of the 63.64% of learners indicated that they heard about it from school, 18.18% indicated that they heard about it at home and the remaining 18.18% indicated that they heard about it on television or radio. Perceptions of the frequency and extent of disasters are just as important as statistical facts. A key factor in this growing risk perception is the media (Gierlach, Belsher, & Beutler, 2010). For the general public, who is exposed to mass media, we may live in an increasingly disaster-prone world (Faulkner, 2001).

The results presented in figure 4 show that 100% of learners thought that our place could be affected by disasters one day. According to Sonali Deraniyagala (2016), the destructive effects of natural disasters are felt more in poorer countries than in more prosperous ones. While both rich and poor nations are subject to natural hazards.

From the results presented above, the majority of learners constituting 50% thought that our place could be affected by floods, and the other 50% thought of earthquakes. Earthquakes, tsunamis, floods, bushfires, hurricanes, droughts, and heat waves have always occurred. These events have formed part of the wider ‘risk scale’ that humans have learned to manage and live with. However, more recently the impacts of disasters have increased substantially, partly because of the exacerbating effects of climate change, but also due to the growing complexity of socio-ecological systems in a highly connected and globalized world (Becken, Mahon, Rennie, & Shakeela, 2014).

Problem 3: What is the learner’s disaster preparedness?

From the results presented above, 100% of learners indicated that they had been taught about disaster preparedness education in classrooms. According to Jason C. McClaren (2020), preparedness could help how students can prepare for natural disasters and other emergencies by developing disaster preparedness plans.

The motivation of the answers given to Question 12 above shows that the majority of learners constituting 22.72%, indicated that they received disaster preparedness education in Grade 4 and Grade 8, while 13.64% indicated that they received such education in Grade 9, and 9.09% showed that they have been taught about it since Grade 3, Grade 5 and Grade 6. Only 4.55% indicated that they had received education regarding disaster preparedness in Grade 7. Those who indicated that they were taught about it, mentioned disaster education was covered in one of their learning areas.

The results presented in figure 5, show that 36.36% of learners indicated that they had been taught about disaster preparedness education in Social Sciences, 45.46% of learners indicated in Natural Sciences, and the remaining 18.18% indicated Life Orientation. According to Abhaya S. Prasad and Louis Hugo Francescutti (2017), the disaster cycle is a framework used to base a coordinated plan to respond, recover, prevent, and prepare for a disaster.

The results presented in figure 5, show that all the learners that participated in the study knew what to do during any emergency at school which constituted 100% of the population. It is not clear whether the result above was motivated by co-curricular activities which included basic disaster awareness and disaster risk reduction such as mock drills, first aid training, training fire safety, and other appropriate response skills, for example, light search and rescue, swimming, evacuation and emergency shelter creation (Ahmedabad Action Agenda for School Safety, 2007:2).

Following their motivation for answers given to question 15 above of whether they knew what to do during any emergency at school, 54.55% of learners who participated in the study taught that they should stay calm to know what to do as they emphasized the fact that they should stop whatever they were doing, while 27.27% of learners and the remaining both 9.09% for praying and evacuate for their safety indicate by the learners.

The results presented in figure 6 above, show that all learners agreed that disaster preparedness should be taught in class. According to the World Health Organization, vulnerability is a degree to which a population, individual, or organization cannot predict, cope, resist, and rehabilitate after the disaster and vulnerable people such as children, pregnant women, the elderly,

malnutrition, and people with disabilities. The significance of disaster education to different classes of society at all levels has been endorsed by a large number of studies.

When motivating their answers from question 16, 100% of learners indicated that such education should be offered in classrooms to empower them with knowledge about disasters, 45.45% to inform learners on what to do in case disaster occurred, 18.18% to stay calm in any disaster, both 13.64% indicated prepared and survived and lastly, 9.09% indicated to keep alert. According to the studies conducted in various countries such as Japan, there is a direct link between education, increased risk perception, and students' risk reduction measures. Encouraging children to think about the importance of preventive measures and preparedness can bridge the gap between knowing and acting on knowledge.

The results presented in Figure 6, show that 100% of learners indicated that emergency drills were performed at their school. The inclusion of such a question was influenced by UNDP (1994:34) as mentioned in Chapter 2, stating that there was a need to rehearse the disaster preparedness plan and that rehearsals would reemphasize points made in separate training programs, test the system, and expose gaps that otherwise might have been overlooked. According to Twig (2004:287), rehearsals, evacuation, and response procedures should be practiced often, evaluated, and improved.

The results presented in figure 6, indicate that 100% of learners indicated that they perform any drills at school. Only 54.54 indicated that they rehearsed evacuation drills, 22.73% rehearsed rescue drills and the other 22.73% indicate that they rehearsed first aid drills. The number of school security drills required every year varies by state or province. Generally, there should be a minimum of one safety drill held each year. But in some areas more are required. Many school districts require that schools hold fire drills at least once every 3 months (BeSafe Technology Inc.2020).

4.0 Conclusions

Based on the findings, the following conclusions were drawn.

1. All the participants of the study were regular students of Grade 10 and no transferees from other schools.
2. Participants were fully aware and very much knowledgeable about disaster risk reduction since it is implemented in their school and identified hazard places near their area.
3. Training related to DRR including emergency drills were conducted annually.

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