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INTENSIFYING SCHOOL-BASED DISASTER AND RISK REDUCTION COPING RESPONSE

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SUBMITTED BY

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Chapter 1

THE PROBLEM AND ITS SCOPE

INTRODUCTION

Rationale of the Study

Asia and Pacific are prone to disasters in the world and one of their challenges is building resilience. In the past years, disasters devastated 2.5 million people in the Asia-Pacific region and killed almost 800,000 people (ESCAP, 2013).

The Philippines, considering it geographical location, is a disaster-prone country (Llanto, 2011). Earthquakes and volcanic eruption can occur anytime since the Philippines is situation in the Pacific Ring of Fire (Blanco, 2015).

International Bank for Reconstruction and Development (2015) reported that the Philippines ranked third among 173 countries that are vulnerable to disaster risks. Moreover, the location of the country also entails highly susceptible to various meteorological hazards and path of tropical cyclones which may turn to storm, typhoon, or even super typhoon.

Safety has been the goal lately of the Philippines after various calamities struck the country that had caused damages not only on the infrastructures but also to loss of lives as well. Due to the country's topographical location, undeniably, there could be more of the unexpected wrath of nature to come. Part of the many preparations of the educating the

students on what to do when the need arises, is for teachers to integrate in their lessons the risk reduction management considering students' young age.This has been reflected even on learners' module such as on examples pertaining to topics that apply. Moreover, teachers instructional plan must highlight the integration of DRR on topics that may apply.

Planning and safety measures have been religiously upgraded by Department of Education to minimize risk when disasters happen. There has been simultaneous earthquake drill as part of its calendar activities to assure that students are reminded on what to do when the need pertaining to calamities arises.The Philippine DRRM system is strengthened through the institutionalization of the National DRRM plan as stipulated in Republic Act 10121 (Sano, 2017).

In fact, DRR education, which aims to equip students with readiness in times of crises, is integrated in Earth and Life Science, a core subject in the K-12 Basic Curriculum for Senior High School. Every school has various DRR related monthly activities to assure that students internalize the importance of the concepts to its actual application.

DepEd Order 21, s.2015, provides protocol on the roles and functions of DepEd region, schools division and schools, as well as the DRRM coordinators in disseminating awareness on how to act before, during and after disasters. This same order capacitates the DRRMO coordinators and other DepEd constituents to disaster and emergencies and facilitates immediate and efficient information flow during disasters and emergencies. All the activities of DRRMO have been carefully crafted by the authorities in charge.

DepEd Order 37 s. 2015 provides a framework as a basis for all DRRM efforts of the basic education towards the attainment of department's

three education outcomes namely; access, quality and governance. Moreover, it determines the direction and crucial areas for DRRM in the education department while keeping the privilege of field offices to determine the activities to be initiated

depending on the school's level of exposure to risks and hazards and the availability of resources. The school's DRRM coordinator is tasked to monitor the activities in school and submits monthly report for purposes of monitoring.

Teachers must as well participate on activities conducted related to disaster risk reduction in school. Along with students, they are also given information regarding the possible risk they will be encounteringas a result of their school'sphysical location. For this matter, teachers have to assist the students whenever risk may happen. They also have their lives to save. With the various relevant activities and information provided by the basic education on risk reduction to students and teachers, it is as well necessary to know how far they have achieved the goals of the basic education regarding the programs of disaster and risk reduction management.Teachers, students and everyone else in school must have the knowledge on what to do in every phase (before, during, and after) of the disaster whether natural or not.The active collaboration among members of the school, especially the students and teachers is important to the successful implementation of DRRM.Furthermore, an assessment about the DRR knowledge to students and teachers will be a significant report on the impact of disaster education. Thus, the research aimed to assess the implementationoftheDisaster Risk Reduction Educationin the public elementary schools in the Division of Mandaue City specifically at Bakilid Elementary School, Cabanclan

Elementary School and MaguikayElemenatry School as basis for coping response on disasters.

Theoretical Background

The study is anchored on the theories of Protection Motivation by R.W Rogers and Planned Behavior by Ice Ajzen. The former theory proposes that people consider these four factor in protecting themselves during disasters namely; their perception of a threatening situation, their perception of the probability of the event or susceptibility, the effectiveness of the recommended precautionary behavior and their perception of self-efficacy (Rogers, 1975).Rogers' Protection Motivation theory has been employed to describe behavior in individual, parent-child, and family units and has been used to describe wildfire and earthquakes in the United States and floods in Europe (Westcott, R. et.al, 2017).

The Protection Motivation theory further states that the arousal of emotional state of fear indirectly affects or influences the change of attitudes and behavior through the assessment of the severity of the threat.

The coping appraisal of this model comprises the individual's expectation that observing recommended behavior and belief in one's competence to carry out the recommended measures successfully (self-efficacy) can eliminate the danger or threat (response efficacy) (Plotnikoff and Trinh, 2009).The motivation to protect oneself from threat, as hypothesized by the PMT, is the role of the four cognitive beliefs namely; one's perception of the severity of the threat, one's vulnerability to the threat, the effectiveness of the coping response in averting the threat, and one's capability to carry out the coping response. This theory is the proximal

The protection motivation model is often measured by or similar to intention and is considered as a proximal causal factor or determinant of protective behavior (Norman et. Al, 2005).

The goal of PMT is to acknowledge and appraise the threat, and counter the appraisal with effective mitigation alternatives thus making this theory suitable to addressing various social problems. In fact, it has already been used to studies on natural hazards like earthquakes and volcanic eruptions in the United States and flooding in France and Germany by Grothmann and Reusswig (2006) in their flood risk research. In fact, the application of PMT as a theoretical framework in studies to elucidate protective behavior of people at risk of flooding has been increasing in number.

The impulse to protect oneself from an actual or perceived threat depends on how a person strikes a balance between his appraisal of the severity of the threat and his appraisal of his coping mechanisms or behavior (Rogers 1983).

The PMT may have gained increasing popularity in terms of applicability, however, several studies on flood mitigation were not able to make certain the expected affirmative relationship or only locate a weak one (see review by Bubeck, Botzen, and Aerts 2012). For instance, the study of Poussin, Botzen, and Aerts (2014) found a negative relationship between the individual's perception of the risk of damage the flood can cause and his mitigating behavior with two out of three mitigating measures.

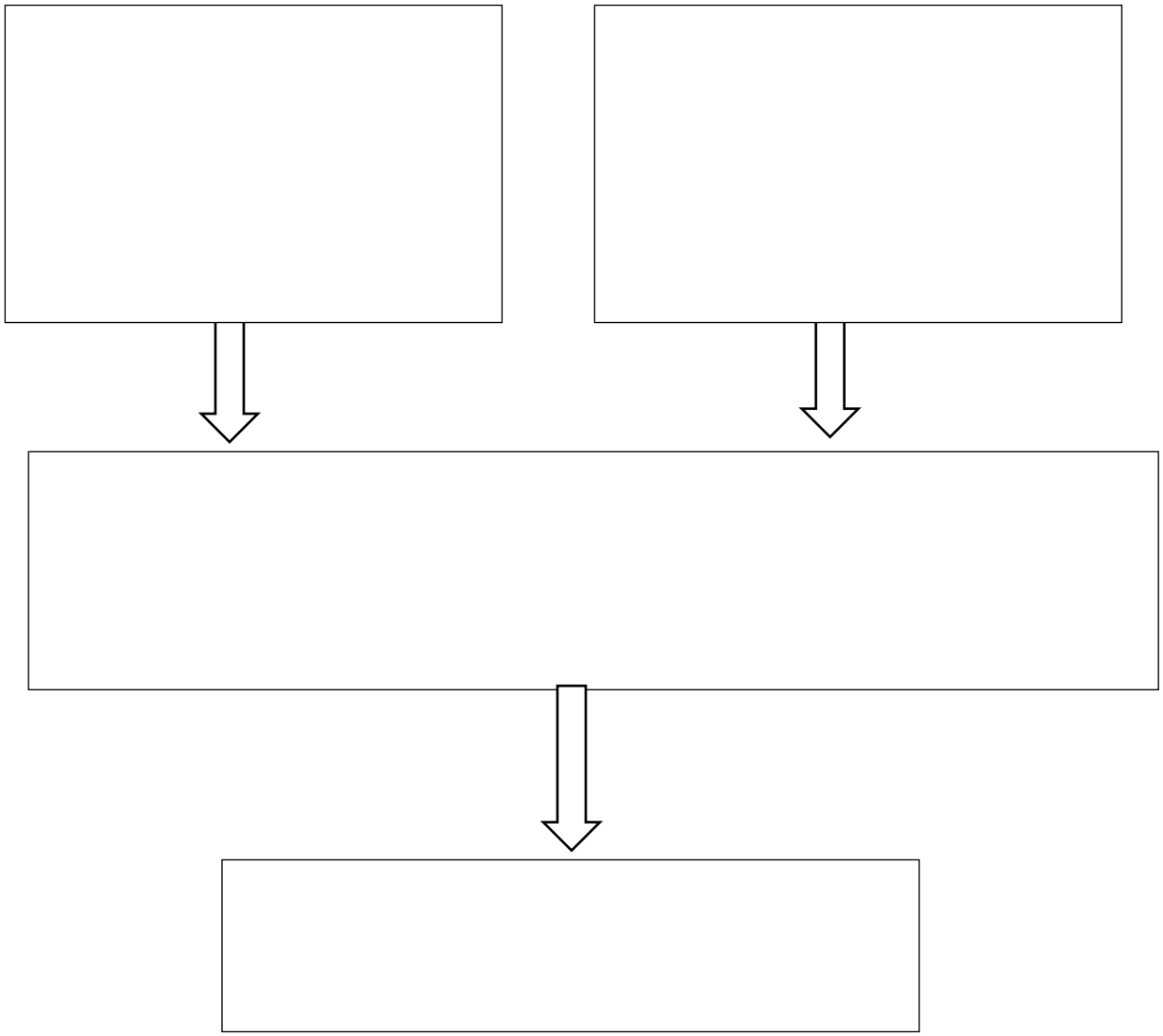

Figure 1

Theoretical Framework

While fear has been identified in some studies to be a determinant for protective motivation, other studies found indirect or no significant influence of fear on protective motivation at all (Grothmann and Reusswig 2006). Moreover, Bubeck, Botzen, and Aerts (2012) reported that the effect sizes of fear on the person's protective motivation are relatively small which is further supported by Bamberg et al (2017) recent meta-analysis that reported small effects of both negative (r=17) emotions and threat assessment (r= .23) on flood preventive behavior.

The theory of planned behavior, on the other hand, was influenced by theory of reasoned action and can be more applied when the possibility of success and actual control over the person's behavioral performance are suboptimal.The concept of an individual's perception on the ease or difficulty doing the specific behavior or the "perceived behavioral control" is the main contribution of the TPB in addition to subjective norms and attitudes that make up the theory of reasoned action (Ajzen, 1987).In planned behavior theory, individuals are probably going to indulge in healthy behavior if it leads them outcomes that they value, if other people, whose views they consider valuable, think they should engage in such behavior and the necessary resources and chances to perform such behavior are available.

The intention to carry out given behavior is the central factor in the planned behavior theory or model as intentions are perceived to capture the motivational factor that affect the behavior (Ajzen, 1991). Intentions are identified or determined by these three motivational factors namely; a) the individual's attitude toward the behavior which refers to the extent to the said individual's evaluation of the behavior in question is either favorable or not, b) the subjective norm which pertains to the individual's perception of

social pressure to perform or not to perform the behavior, c) the extent of perception of one's behavioral control which refers to the ease or difficulty in carrying out the said behavior.

Generally, the higher the person's perception of one's behavioral control and the more favorable and positive the attitudes and subjective norm are, the stronger the person's intention and motivation to carry out the behavior taken into consideration. Intention is, indeed, a determinant to actual performance of behavior (Najafi, 2017).

While intention is an important factor in the performance of the behavior under consideration, the non-motivational factors such the availability of the necessary resources and opportunities also play an equally important role in the whole performance of such behavior (Ajzen, 2002).

Department order no. 21 s. 2015 clearly set out the coordination and Information Management system across all concerned levels in the department from the regional offices down to the school levels. The said order establishes a system of coordination and information management that guides the DepEd field offices, schools and DRRM coordinators regarding their job descriptions in the implementation of the DRR Education.

The following are the roles and functions of the people involved in DRR Education from all levels (region, division, and school levels) as articulated in the said order:

1. guide regions and school division as well as the DRRM focal persons on the measures to take before, during, and after disasters;
2. empower the DRRMO focal persons and other DepEd personnel to take active roles during disasters and emergencies; and
3. ensure efficient dissemination of information during emergencies

The Comprehensive DRRM in Basic Education Framework aims to protect learners and other school personnel from injury, harm, and death in schools, put in place measure to ensure that the continuity of education in the face of threats or crises, protect investments in the education sector and improve resilience and risk reduction program through education.

The framework set out in the policy is meant to provide the school with a guide their assessment, planning, implementation of preventive and mitigating responses, preparation, and recovery and rehabilitation interventions.

The identification of hazards and risks and interventions to address these hazards is done at the school level of which the collaboration between the School Planning Team (SPT) and School DRRM Team (SDT) is of utmost importance. These two teams are responsible in the planning, implementing, monitoring, evaluating, and reporting of the DRRM interventions.

THE PROBLEM

Statement of the Problem

This research studyaimed to assess the implementation of the Disaster Risk Reduction Education (DRRE) in the identified public Elementary Schools inthe Division of Mandaue City in theschool year 2019-2020 as basis for coping response mechanism.

Specifically, it sought to answer the following:

1. What is the profile information related to DRRE as to:
   1.1 teachers'
      1.1.1 age and gender,
      1.1.2 area of specialization,

1.1.3 teaching experience,

1.1.4 relevant DRR trainings and seminars attended

1.2 learners'

1.2.1 age and gender, and

1.2.2 involvement of DRRE activities and

1.3 schools'

1.3.1 record of DRR occurrence

1.3.2 resources?

2. What is the level of awareness of the teachers and students in the following disasters:

   2.1 fire,

   2.2 flood,

   2.3 typhoon,

   2.4 earthquake, and

   2.5 other calamities?

3. As perceived by the respondents, to what extent do the following activities enhance their implementation of DRRE:

   3.1 lecture and video presentation,

   3.2 picture and story show,

   3.3 DRR drawing and coloring,

   3.4 DRR jingle, and 'evacuation drill, and

   3.5 Stress debriefing?

4. Is there a significant difference between the indicated information and the implementation of DRRE?

5. Is there a significant difference between the perceptions of the respondents?

6. Based on the findings, what school-based disaster and risk reduction coping response can be developed?

Null Hypothesis

Ho: There is no significant difference between the perceptions of the respondent.

Significance of the Study

The findings of this study will be a great help to the following:

School Administrators. With the results on the assessment of teachers and students' knowledge pertaining to the various activities of DRR, school administrators will be able get research-based data and will know which area/activities needed to be improved so that the students and the teachers will be able to understand and internalize it further to achieve to goals of DepEd pertaining to such matter.

Teachers. With this study teachers will be able to know further strategies to integrate DRR to their classes to maximize learning the DRR related concepts. They as well will be aware of their students 'level of understanding pertaining to DRR activities and will have research-based data on which area needs to be elaborated further.

Students. Maximize their awareness on Disaster and Risk Reduction and improve their knowledge as well pertaining to it.

Parents. They will also increase awareness on important information pertaining to DRR. In this sense, they will help the school on its activities related to DRR.

Future Researchers. This study will serve as addition basis or reference for the researchers to broaden their concepts on DRR related matters.

RESEARCH METHODOLOGY

This part discusses the research methodology which includes the design used, the flow of the study, research locale, research respondents, research instruments, data collection procedures, statistical treatment of data, scoring procedures and definition of terms.

Research Design

The research is a descriptive survey design which aimed to assessstatus of the implementation of the Disaster Risk Reduction Education (DRRE) in the identified public elementary schools in the Division of Mandaue City in the school year 2019-2020 as basis for coping response mechanism.

Flow of the Study

The researchers obtained first the approval of the Schools' Division Superintendent of Mandaue City Division. A consent letter was given to the respondents for ethical considerations. The respondents were oriented with their full participation of the study. The study made use of the input-process-output approach to further describe the flow of the study. The INPUT part includes the profile of the teachers and students in terms of their age and gender, field ofspecialization, teaching experience and trainings relevant to

DRR activities, their level of awareness of the practices done before, during, and after disasters;

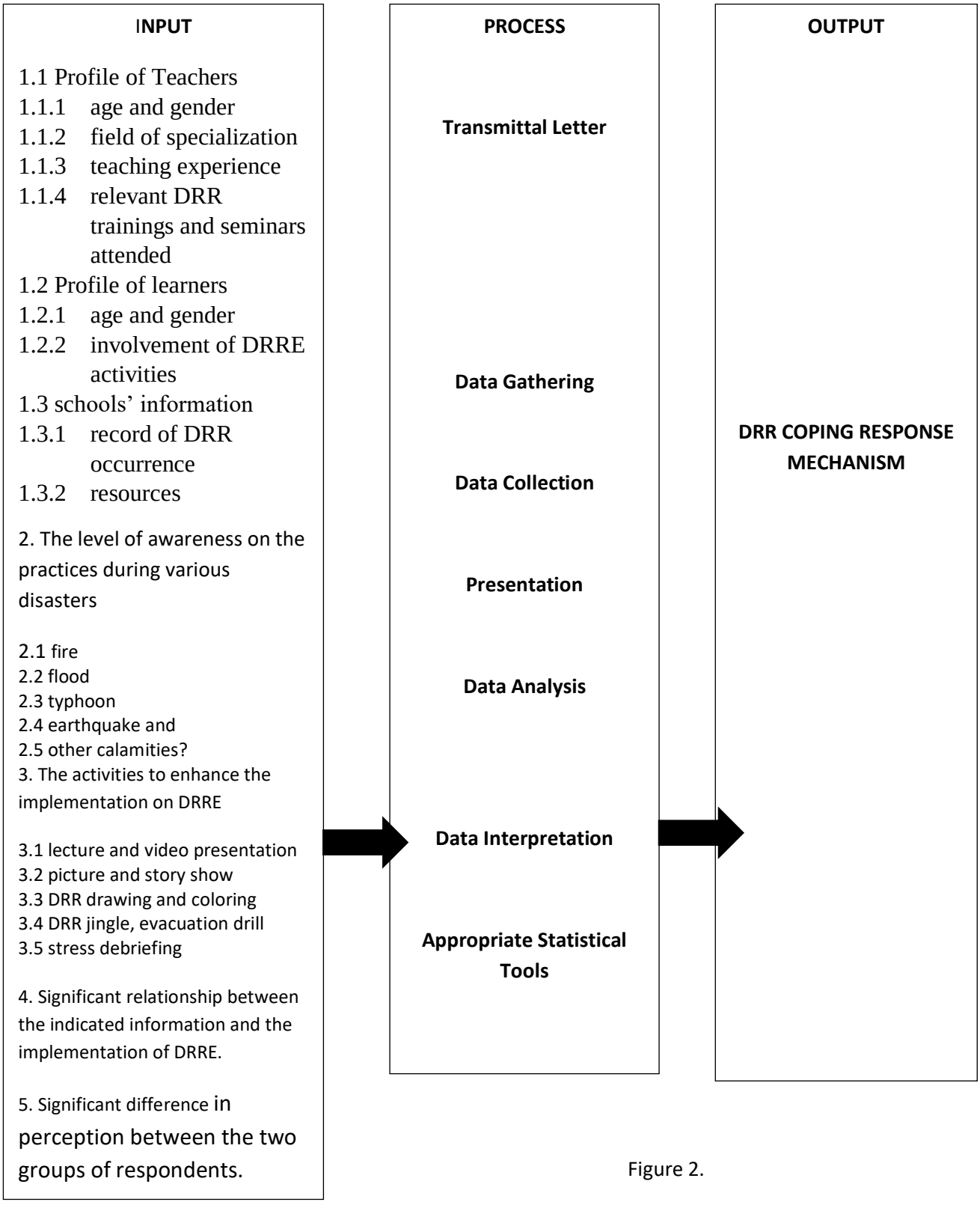

Figure 2.

Flow of the Study

activities to enhance the awareness of the DRR and the significant difference between the perceptions of the groups of respondents on the extent of activities and interpreting data and using the appropriate statistical tools. The OUTPUT ofthe study was the DRR coping response mechanism.

Environment

The research was conducted at the three public elementary schools of Mandaue City Division namely; BakilidElementary School, CabancalanElementary School andMaguikay Elementary School which belong to West District.

Bakilid Elementary School is situated on L. Jayme Street, Bakilid, Mandaue City, Cebu. It is a complete elementary with 17 teachers and a school head. Bakilid Elementary School aspires to nurture and empower learners to be self-motivated, globally competitive, capable of coping with the demands and changes if time with the basic skills needed in the elementary curriculum, communicates and collaborates with others that will support them to become assets in the community, the county and to the world. It fervently aspires to motivate its learners to live out the core values of the school respect, perseverance, honesty and love.

Cabancalan I Elementary is situated in ML Quezon Street, Cabancalan, Mandaue City. It has a total land area of 5,044 square meters complete

Figure 3

Location Map of the Study

Facilities. Cabancalan I Elementary School is managed and supervised by a school principal having a plantilla position of principal II with 64 competent classroom teachers. It caters kindergardten to grade six level. It has 2 shifts of classes to cater to the needs of the school populace which is 2,224.

Cabancalan I Elementary School is applauded with numerous awards in division level as well as in regional level. It has been known as a regional winner for the GAWAD KALASAG, Eco-friendly School and BrigadaEskwela. The creativity, innovativeness, integrity and productivity of the school head, faculty, and stakeholders enables the school to perform well in the field of the curriculum and instruction. Each one of us aims to have an exemplary contribution to the school in making authentic learning to happen in the lives of our public-school learners.

On the other hand, Maguikay Elementary School is located on Albano Street, Maguikay, Mandaue City. It had been a primary school when it was founded on February 25, 1962. In July, 1996, it became a complete elementary school. It has been a headquarter school or the central school of the West District of the DepEd Mandaue City through the years until this day. It is a mono grade school. It has a total land area of 4, 534 square meters fully occupied with 42 classrooms and 8 ancillary rooms. Maguikay

Elementary School is managed and supervised by a school principal having a plantilla position of principal IV with 57 competent classroom teachers. The school was able to raise funds that provide a huge impact in accomplishing our programs and projects. The stakeholders like VECO-Visayan Electric Company, LEAR Corporation, Phoenix Philippines, All Food Asia, World in Need Baptist Church, Alumni, Teachers, PTA, city and barangay officials, government agencies that generated funds in various projects like school feeding program, school supplies for our learners, school beautification, comfort rooms' rehabilitation, construction of feeding area, mini gym extension, school rewiring and other school minor repairs which will become Maguikay Elementary School more conducive to learning.

Respondents

The 133 teachers and 150 learners were randomly selected from Bakilid Elementary School, Maguikay Elementary School and Cabancalan I Elementary School in the Division of Mandaue City in the school year 2019-2020.

Table 1
Distribution of the Respondents

Schools	**Teachers** F	**Students F**	Total	%
Bakilid Elem.	17	50	67	26.67
Cabancalan Elem.	62	50	112	39.58
Maguikay Elem.	54	50	104	36.75
Total	133	150	283	100

Instrument

The researcher adopted a validated questionnaire from DepEd's Memorandum on DRRE. The questionnaire consists of three parts; part I for the demographics, part II contains items that assess the level of knowledge or awareness among teachers and students about the various disasters and Part III contains the assessment on the level of awareness related to DRR activities.

Data Gathering Procedure

A letter of request was forwarded to the Schools' Division Superintendent of Mandaue City Division and to the principals of the different schools regarding the intention to the conduct the study. The school

head was informed further about the context of the study and how it was useful for future references of improving DRR related activities before the researcher can proceed to the data collection of the said study. The consenting respondents were informed as well about their full participation of the study and were oriented on the context of the study and how their response matters for its success. There was no forcing to answerthe prepared survey when the respondents choose not to.

Statistical Treatment

To analyze and interpret the data gathered from the responses, the following statistical tools were deemed appropriate for the study:

Percentage. This was utilized to get the breakdown of the respondents' profiles.

Weighted Mean. The weighted mean was employed to determine the level of awareness on the mentioned disasters among teachers and students and to get their level of activities as well on DRR activities.

T-Test. T-test was utilized to test the significant difference among the responses regarding the perception of the groups of respondents on the

extent of the implementation of the activities that enhanced the awareness of DRR.

Scoring Procedure

The study made use of the 5-point Likert Scale to identify the level of awareness on various disasters among teachers and students and the level of awareness as well on DRR activities. Details on the numeric range and its corresponding verbal ratings are summarized below.

Level of Knowledge and Awareness on Various Disasters

Weight	Range	Category	Verbal Descriptions
5	4.21-5.0	Very Much Knowledgeable	The respondentshave very highUnderstanding to the given Statement.
4	3.41-4.20	Much Knowledgeable	The respondents have a highunderstanding to the givenStatement.
3	2.61-2.60	Knowledgeable	The respondents have Understandingto the givenStatement
2	1.81-2.60	Less Knowledgeable	The respondents have littleUnderstanding to the givenStatement.

1	1.00-1.80	Not Knowledgeable	The respondents have no understanding to the given statement.

Level of Awareness on DRR Activities

Weights	Range	Category	Verbal Description
5	4.21-5.00	Very Much Enhanced	The respondents have a very high knowledge to thegiven statement.
4	3.41-4.20	Much Enhanced	The respondents have a high knowledge to the given statement.
3	2.61-3.40	Enhanced	The respondents have knowledge to the given Statement.
2	1.81-2.60	Less Enhanced	The respondents have little knowledge to the given statement.
1	1.00-1.80	Not Enhanced	The respondents have no knowledge to the given statement.

DEFINITION OF TERMS

The following terms are defined based on how they were used in the study.

Disasterspertain to the kinds of emergencies that are either natural or man-made which can be beyond the control of the affected individuals and may incur loss of properties and lives and disrupt the social structure.

Disaster Impactis the effect of a disaster that requires immediate response.

Disaster Mitigationrefers to the introduction of measures intended to prevent and mitigate the adverse consequences of a disastrous phenomenon with the aim to protect lives and properties even before the disaster strikes.Building earthquake and typhoon-resistant structures and situating human dwellings far from disaster-prone areas are just some examples of disaster-mitigating measures.

Disaster Preparednessis the state of feeling at ease despite knowledge of an incoming or imminent disaster because plans have already been laid out, resources have been allocated and procedures have been established for the effective and efficient implementation of the laid out plans.

Disaster Risk is the possibility of suffering from a disaster which entails loss of lives, health and livelihoods in a certain community for an indefinite period of time.

Disaster Risk Managementis a systematic approach of implementing policies, strategies and coping capabilities of the community in order to prevent or limit the effects of natural and technological disasters with structural and non-structural measures by utilizing administrative decisions and operational skills.

Disaster Risk Reductionpertains to the practice of minimizing the risk that a disaster can bring about the organization of efforts in examining and managing the reasons of disasters including avoiding exposure to hazards, lessening susceptibility of people and properties, managing the environment wisely, and improving preparedness for adverse eventualities.

Disaster Risk Reduction Activitiesrefer to the programs and activities suggested by the DRR team to be integrated in the teachers' instructional plan and in the delivery of their lesons.

Emergencyis any event that threatens the life and well-being of people unless addressed immediately and appropriately. This almost always demands extraordinary measures.

Hazard is any phenomenon that has the potential to cause damage or injury to people, property and the environment.

Preventive Measuresare things done to avoid the adverse effects of any unpleasant situations and even minimize related biological, environmental, and technological disasters.

Risk Assessment / Analysis is a tool identifies the nature and extent of threat or risk by analyzing possible hazards and appraising existing condition of susceptibility that poses potential threat to people, property, means of living, and the environment where they get sustenance from.

Topography is the detailed graphical delineation on maps or charts of features of a place or region whether natural or man-made.

Chapter 2

PRESENTATION, ANALYSISAND INTERPRETATION OF DATA

This chapter shows the data collected from the identified public schools in Mandaue City Division. The said data were analyzed and interpreted using the appropriate statistical tools in order to achieve the purpose of the study.

INFORMATION RELATED TO DISASTER RISK REDUCTION

This part consists of the profile of the respondent groups. Details pertaining to age and gender and the rest of the indicated information about them were emphasized on the tables below.

Teachers' Profile

The teacher respondents' profile is based on their age and gender, area of specialization, teaching experience and the related DRR trainings or seminars attended.

Age. Table 2 presents the distribution of the teacher respondents as to age. It was observed that most of the teacher respondents are from the age range of 31-40 having a frequency of 53 which is 39.85% while the smallest number of the indicated respondents got a total number of 16 which 12.03 % belong to 51 years and above age range. 37 of them have an age of 41-50 that is 27.82% while 27 of them from the age range of 21-30 which is 20.30%.

Table 2
Distribution of Teacher Respondents as to Age

Age	Maguikay Elem School (F)	%	Bakilid Elem. School (F)	%	Cabancalan Elem. School	%	Total	%
51 years and above	9	16.67	2	11.76	5	8.06	16	12.03
41-50 years old	12	22.22	5	29.41	20	32.26	37	27.82
31-40 years old	23	42.59	7	41.18	23	37.10	53	39.85
21-30 years old	10	18.52	3	17.65	14	22.58	27	20.30
Total	54	100	17	100	62	100	133	100

Gender. The table 3 reflects teachers' gender distribution. It was clear from the table that Maguikay Elementary School teachers' respondents had 5 males and 49 females which is 9.26% and 90.74% respectively while there were 1 male and 16 females from Bakilid Elementary School which is 5.88% and 94.12 %. Cabancalan elementary School teacher respondents had 5 males and 57 females which is 8.87% and 91.94%.

Table 3
Distribution of Teacher Respondents as to Gender

Gender	Maguikay Elem School (F)	%	Bakilid Elem. School (F)	%	Cabancalan Elem. School	%	Total	%
Male	5	9.26	1	5.88	5	8.06	11	8.27
Female	49	90.74	16	94.12	57	91.94	122	91.73
Total	54	100	17	100	62	100	133	100

Area of Specialization. The data from table 4 entails that majority of the teacher respondents were BEED graduates comprising the total sample of 129. Meanwhile, 4 of the respondents were BSED graduate.

Table 4
Teacher Respondents' Areas of Specialization

Course	Maguikay Elem School (F)	%	Bakilid Elem. School (F)	%	Cabancalan Elem. School	%	Total	%
BEED	54	100	17	100	58	93.55	129	96.99
BSED	0	0	0	0	4	6.45	4	3.01
Total	54	100	17	100	62	100	133	100

Teaching Experience. Table 5 summarizes the number of years in teaching of the teacher respondents. According to the data, out of 133 respondents, there were 39 teachers who had 5 years and below, 35 teachers had 6-10 years teaching experience, 25 teachers had 11-15 years of teaching experience, 22 teachers had 21

years and above experience and 12 teachers had 16-20 years of teaching experience.

Table 5
Teacher Respondents' Teaching Experience

Years of of Teaching Experience	Maguikay Elem School (F)	%	Bakilid Elem. School (F)	%	Cabancalan Elem. School	%	Total	%
21 years and above	10	18.52	4	23.53	8	12.90	22	16.54
16-20 years	5	9.26	5	29.41	2	3.23	12	9.02
11-15 years	10	18.52	5	29.41	10	16.13	25	18.80
6-10 years	18	33.33	1	5.88	16	25.81	35	26.32
5 years and below	11	20.37	2	11.76	26	41.94	39	29.32
Total	54	100	17	100	62	100	133	100

Relevant Trainings Attended. The relevant trainings attended by the teacher respondents were Training of trainers related to DRRE which was attended by 4 teachers; 2 from Maguikay Elementary School and the other 2 from Bakilid Elementary School, Basic Incident which was attended by 3 teachers from Maguikay, 1 teacher from Bakilid and 6 teachers from Cabancalan. There was also occupational first aid training which was attended by 8 teachers of Maguikay, 2 teachers of Bakilid and 9 teachers of Cabancalan. Furthermore, there was also 1st DRRM evaluation training attended by 1 from Bakilid and 1 r from Cabancalan.

Capability Building training was attended by 10 teachers and Training Workshop on DRR was attended by 45 teachers. The number of attendees on the various schools was reflected on the table.

Table 6
Teacher Respondents' Relevant Trainings Attended

Relevant trainings Attended	Maguikay Elem School (F)	%	Bakilid Elem. School (F)	%	Cabancalan Elem. School	%	Total	%
Training Tot Workshop	2	3.33	2	25	0	0	4	4.44
Basic Incident	3	5.00	1	12.5	6	27.27	10	11.11
Occupational First Aid	8	13.33	2	25	9	40.91	19	21.11
1st DRRM Evaluation	0	0.00	1	12.5	1	4.55	2	2.22
Capability Building	7	11.67	1	12.5	2	9.09	10	11.11
Training Workshop	40	66.67	1	12.5	4	18.18	45	50
Total	60	100	8	100	22	100	90	100

Learner Respondents Profile

This part consists of the learners' age and gender and their involvement to DRRE related activities.

Age. Reflected from the table is the distribution of the learner respondents in terms of age. Data revealed that 50% of the learners were 11-12 years old while the rest of the 50% were 13-14 years old.

Table 7
Learner Respondents' Age

Age	Maguikay Elem School (F)	%	Bakilid Elem. School (F)	%	Cabancalan Elem. School	%	Total	%
13-14 years	25	50	20	40	30	60	75	50
11-12 years	25	50	30	60	20	40	75	50
Total	50	100	50	100	50	100	150	100

Gender. Out of 150 total learners involved in the study, 97 of them which is 64.67 % are female while 53 learners are male which is 35.33 % of the entire sample.

Table 8
Learner Respondents' Gender

Gender	Maguikay Elem School (F)	%	Bakilid Elem. School (F)	%	Cabancalan Elem. School	%	Total	%
Male	22	44	20	40	11	22	53	35.33
Female	28	56	30	60	39	78	97	64.67
Total	50	100	50	100	50	100	150	100

DRR Activities Participated. Lecture and Video Presentation activity for DRR was participated by 106 students which 14.36 of the total learners who

attended the said activity, picture story was attended by 100 students which is 13.55 % in comparison with the total samples, DRR Drawing was participated by 26 learners which is 3.56 %, Evacuation Drills was participated by 141 learners or 19.11% of the respondents, DRR Reading was joined by 39 learners or 5.28% of the learner respondents, DRR writing was attended by 41 total learner respondents which is 5.56%, DRR school watching was participated by 90 respondents which is 12.20%, DRR memorial had attended by 15 learners or 2.03 % of the respondents, DRR calculating has zero participation and DRR Card was attended by 8 teachers which is 1.08% of the total respondents. Furthermore, the DRR cooking related activity was participated by 29 learners which was 3.93% of the total respondents.

The data concluded that there were 738 total participation of the on the activities stipulated on DRRE memorandum of the Department of Education.

Table 9
Learners' Participation on DRR Activities

Activities	Maguikay Elem School (F)	%	Bakilid Elem. School (F)	%	Cabancalan Elem. School	%	Total	%
Lecture and Video Presentation	45	13.31	23	11.86	38	18.45	106	14.36
Picture Story	33	9.76	34	17.53	33	16.02	100	13.55

DRR Drawing	10	2.96	11	5.67	5	2.43	26	3.52
DRR Jingle	50	14.79	50	25.77	43	20.87	143	19.38
Evacuation Drills	50	14.79	50	25.77	41	19.90	141	19.11
DRR Reading	32	9.47	1	0.52	6	2.91	39	5.28
DRR Writing	28	8.28	0	0.00	13	6.31	41	5.56
DRR School Watching	50	14.79	25	12.89	15	7.28	90	12.20
DRR Memorial	15	4.44	0	0	0	0.00	15	2.03
DRR Calculating	0	0.00	0	0	0	0.00	0	0.00
DRR Card	5	1.48	0	0	3	1.46	8	1.08
Emergency Cooking	20	5.92	0	0	9	4.37	29	3.93
Total	338	100	194	100	206	100	738	100

Schools' Information

The schools have no DRR occurrences that is why no record found on the table.

Table 10
Record of DRR Occurrences

NONE		

Table 11 showed the DRR resources found on the school. Among the said resources are fire extinguishers, emergency lamps, emergency lights, flashlights, boots, helmets, megaphones, medicine kit and reflector vest.

Table 11

DRR Resources
Fire Extinguishers
Emergency Lamps
Emergency Lights
Flashlights
Boots
Helmets
Megaphones
Medicine Kit
Reflector Vest

LEVEL OF AWARENESS ON VARIOUS DISASTERS

This part is related to the assessment of the respondents' level of awareness on the indicated disasters before, during and after.

Fire

The respondents were assessed on their level of awareness before, during and after the fire. The said assessments were summarized on table 12, 13 and 14.

Before the Fire. Both the teachers and the learners were assessed according to their awareness on what to do before the fire. The data from table 12 speaks of their responses.

Table12
Before Fire

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Don't block the area with trash or storage junk.	3.85	MK	4.01	MK
Ready the emergency kit and the first aid box at all times.	3.98	MK	4.***33***	VMK
Keep a 3 feet-distance between heaters and anything than my burn.	3.84	MK	3.99	MK
Never use burned switches or damaged extension wires.	4.28	VMK	4.61	VMK
Unplug electronic appliance that emits smoke or produces unusual smell.	4.30	VMK	4.43	VMK
Ave. Weighted Mean	4.05	MK	4.27	VMK

Legend:

4.21- 5.00	Very Much Knowledgeable
3.41- 4.20	Much Knowledgeable
2.61- 3.40	Knowledgeable
1.81- 2.60	Less Knowledgeable
1.00- 1.80	Not Knowledgeable

Table 12 before the fire data revealed that the practices pertaining to: "don't block the area with trash or storage junk" got a weighted mean of **3.85** and **4.01** which means they are **Much Knowledgeable** on such item, "ready the emergency kit and the first aid box at all times" got **3.98** and **4.33** which means the teachers were **Much Knowledgeable** while the learners were **Very Much Knowledgeable**, "Keep a 3 feet-distance between heaters and anything than my burn" got of **3.84** and **3.99** which means the respondents were **Much Knowledgeable** on the said

item, "never use burned switches or damaged extension wires" got **4.28** and **4.61** which means both the teachers and learners were **Very Much Knowledgeable**, and for "unplug electronic appliance that emits smoke or produces unusual smell, it got means **4.30** and **4.43** which entails that the respondents were **Very Much Knowledgeable** on it.

The data concluded the average weighted means of **4.05** which is **Much Knowledgeable** for teachers and **4.27** which denotes **Very Much Knowledgeable** for the learners.

During the Fire. Table 13 was the summary of the respondents' responses on during the fire disasters. From the table, it showed that the practices pertaining to "stop, drop, and roll if your clothes are on fire until the fire is out" got means of **3.95** and **4.17** which means the respondents were both **Muck Knowledgeable**, "scream for help but never run as running makes the burning faster" got **3.87** and **4.06** which means the teachers and learners were **Much Knowledgeable**, "use carpet, blanket or any handy thick material to cover the person on fire" got **9.95**and **4.10** which means they are **Much Knowledgeable**, "contact the fire department right away" got means of **4.32** and **4.35** which means both respondents were **Very Much Knowledgeable** about the practice, and"try to control or stop one of the

elements that cause fire: Heat , Fuel and Oxygen' got means of **4.04** and **3.96** which entails the two respondents were **Much Knowledgeable** about it.

Table 13
During Fire

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Stop, drop, and roll if your clothes are on fire until the fire is out.	3.95	MK	4.17	MK
Scream for help but never run as running makes the burning faster.	3.87	MK	4.06	MK
Use carpet, blanket or any handy thick material to cover the person on fire.	3.95	MK	4.10	MK
Contact the fire department right away.	4.32	VMK	4.35	VMK
Try to control or stop one of the elements that cause fire: Heat , Fuel and Oxygen	4.04	MK	3.96	MK
Ave. Weighted Mean	4.03	MK	4.13	MK

The above data got a mean of **4.03** and **4.13** respectively which as a verbal description of **Much Knowledgeable** both Teacher and Learner Respondents. This signifies that the two are more than knowledgeable on what to do during the fire.

After the fire. Table 14 refers to the awareness on the after the fire disaster. It was found out from the table that the items on, "immediately soak the wound under cool water for 10-15 minutes if someone gets burned and consult a doctor when blisters appear on the burned area" had weighted means of **3.75** and **2.77** with the

verbal descriptions of **Much Knowledgeable** for teachers and **Knowledgeable** for Learners; “advise someone who has inhaled smoke or fumes to see a doctor for medical attention”, got means of **3.80** and **3.00** with verbal descriptions of **Much Knowledgeable** and **Knowledgeable**; “remove pieces of jewelry or clothing around the burned area of the skin but never remove object stuck on the affected area to avoid further damage” got **3.70** and 2.45 with verbal descriptions of **Much Knowledgeable** and **Knowledgeable**; “once already outside of the burning building, for any reason, never go back inside” had means of **4.23and 3.81** which means the teachers are **Very Much Knowledgeable** while learners are **Much Knowledgeable**; “go back inside only when someone from the fire department has declared the place safe for re-entry” had means of **4.29** for teachers and **3.31** for learners. This means that the teachers are **Very Much Knowledgeable** while the learners are **Knowledgeable**.

The overall weighted mean of the after the fire responses got means of **3.95** for teachers with a verbal description of **Much Knowledgeable** while for learners it was **3.07** which means they are **Knowledgeable** on the practices. Comparing the two, the learners need to get themselves more acquainted of what to do after the fire to level up their knowledge related to it.

Table 14
After Fire

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Immediately soak the wound under cool water for 10-15 minutes if someone gets burned and consult a doctor when blisters appear on the burned area.	3.75	MK	2.77	K
Advise someone who has inhaled smoke or fumes to see a doctor for medical attention.	3.80	MK	3.00	K
Remove pieces of jewelry or clothing around the burned area of the skin but never remove object stuck on the affected area to avoid further damage.	3.70	MK	2.45	K
Once already outside of the burning building, for any reason, never go back inside.	4.23	VMK	3.81	MK
Go back inside only when someone from the fire department has declared the place safe for re-entry.	4.29	VMK	3.31	K
Ave. Weighted Mean	3.95	MK	3.07	K

Flood

The respondents were measured regarding their level of awareness if the practices before, during and after flood.

Before the flood. The respondents' level of awareness before the flood were assessed to know how far they've understood the related disaster.

Table 15
Before Flood

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Familiarize the early warning for imminent flood and the community's evacuation plan.	3.78	MK	3.37	K
Take part in the flood preparedness drills and activities in the community.	3.75	MK	2.49	K
Transfer essential home items to the upper floors.	3.98	MK	3.55	MK
Keep the family emergency bag with items for survival handy.	3.93	MK	3.67	MK
Move pets and livestock in designated evacuation areas for animals.	3.89	MK	3.26	K
Ave. Weighted Mean	3.87	MK	3.27	K

Table 15 revealed that practices related to "Familiarize the early warning for imminent flood and the community's evacuation plan" got means of **3.78** and **3.37** which means the teachers were **Much Knowledgeable** than the learners since they are just **Knowledgeable** on the Verbal Description," Take part in the flood preparedness drills and activities in the community", has means of **3.75** and **2.49** respectively which means that the teachers were **Much Knowledgeable** than the learners who were just **Knowledgeable** about the item. Moreover, on "Transfer essential home items to the upper floors, "got means of **3.98** and **3.55** which was **Much Knowledgeable** on the said practice. Furthermore, on "Keep the family emergency bag with items for survival handy" has means of **3.93** and **3.26** with

their corresponding verbal descriptions of Much Knowledgeable while for "Move pets and livestock in designated evacuation areas for animals" had means of **3.89**and **3.26**. This entails that teachers**are Much Knowledgeable** than learners who are just Knowledgeable on the said item.

The overall data suggests more enhancement on learner's knowledge pertaining to before flood. The mean of the teachers which is **3.87** means that they are **Much Knowledgeable** compare with the Learners who are just **Knowledgeable** having a mean of **3.27.**

During the flood. Reflected from table 16 are the responses pertaining to during flood of the teacher and learner respondents. From the data below, the practices regarding "Stay in elevated area and keep oneself updated with the latest news on weather" has means of 4.25 and 3. 68 which implies that the teachers were Very Much Knowledgeable on the practice while the learners were Much Knowledgeable. On "Never touch any electrical equipment with wet hands or when standing in floodwater" has means of 4. 27 and 4.15 which has **Very Much Knowledge** for teachers and **Much Knowledgeable** for learners. The practice related to "Never go boating or swimming if the rivers are swollen" has means of **4.22** and 4.09 with verbal descriptions of **Very Much Knowledgeable** and **Much knowledgeable**. Moreover, on "Avoid crossing rivers or streams whose water is

above the knee" got means of **4.22** for teachers which entails that they are **Very Much Knowledgeable** on the mentioned item while the learners got only **3.48** which implies **Much Knowledgeable** on the said item. Furthermore, "Never pass or drive through areas soaked or covered in flood" got means of **4.16** and **4.06**. It means that both the teachers and the learners are **Much Knowledgeable** on the said item. The overall mean for teachers which is **4.22** signifies that they are **Very Much Knowledgeable** while the learners got **3.89** which entails they are **Much Knowledgeable** on what to do during flood.

Table 16
During Flood

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Stay in elevated area and keep oneself updated with the latest news on weather.	4.25	VMK	3.68	MK
Never touch any electrical equipment with wet hands or when standing in floodwater.	4.27	VMK	4.15	MK
Never go boating or swimming if the rivers are swollen.	4.22	VMK	4.09	MK
Avoid crossing rivers or streams whose water is above the knee.	4.22	VMK	3.48	MK
Never pass or drive through areas soaked or covered in flood.	4.16	MK	4.06	MK
Ave. Weighted Mean	4.22	VMK	3.89	MK

After Flood. The respondents were assessed according to their knowledge on what to do after flood as indicated on Table 17.

Table 17
After Flood

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Return home from the evacuation area only when authorities say it is already safe to do so.	4.22	VMK	4.07	MK
Report to the proper authorities any sightings of fallen trees and electric posts.	4.18	MK	2.89	K
Before turning on electricity, ensure electrical wirings and appliances are not wet.	4.12	MK	3.69	MK
Check for damages in the house for necessary repairs.	4.22	VMK	3.84	MK
Ensure that drinking water is not contaminated by or mixed with flood water.	4.27	VMK	3.96	MK
Ave. Weighted Mean	4.20	MK	3.69	MK

Data above revealed that the teachers have Very Much Knowledge on "Return home from the evacuation area only when authorities say it is already safe to do so" with a mean of 4.22 while the learners have Much Knowledge with a mean of 4.07.Report to the proper authorities any sightings of fallen trees and electric posts " got mean of 4.18 and 2.89 which denotes that the teachers were Much Knowledgeable while the learners were Knowledgeable on the said practice. Meanwhile, for "Before turning on electricity, ensure electrical wirings and appliances are not wet" got means of **4.22** and **3.84** which signifies that teachers are **Very Much Knowledgeable** while learners are **Much Knowledgeable**.

Moreover, for "Ensure that drinking water is not contaminated by or mixed with flood water" has means of 4.27 and 3.96. Teachers are **Very Much Knowledgeable** than leaners who are Much Knowledgeable.

Overall, the average weighted mean of teachers which was **4.20** entails that teachers are ***Much Knowledgeable*** same with the learners whose mean was 3.69. It simply denotes that know what do after the flood.

Before typhoon. Teacher and learner respondents were also assessed on their level of awareness on what to do before the typhoon

Table 18
Before Typhoon

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Keep oneself posted with the latest weather updates.	4.32	VMK	4.35	VMK
Familiarize the early warning signals and the community's evacuation plans.	4.14	MK	3.57	MK
Ensure the sturdiness of your house and repair or strengthen the parts that may not stand the typhoon.	3.96	MK	3.33	K
Keep the family emergency bag with items for survival handy.	4.09	MK	4.05	MK
Move pets and livestock in designated area of evacuation for animals.	4.08	MK	3.33	K
Ave. Weighted Mean	4.12	MK	3.72	MK

Reflected from the table are the practices before typhoon such as "Keep oneself posted with the latest weather updates got ***Very Much Knowledgeable*** on

both teachers and learners with the means of **4.32** and **4.35**; "Familiarize the early warning signals and the community's evacuation plans" got means of **4.14** and **3.57** having verbal description of ***Much Knowledgeable***, "Ensure the sturdiness of your house and repair or strengthen the parts that may not stand the typhoon" has means of **3.96** and **3.33** which denotes that teachers are ***Much Knowledgeable*** than learners who are just **Knowledgeable** on the said practice; "Keep the family emergency bag with items for survival handy" got means of **4.09** and **4.05** with verbal description of both ***Much Knowledgeable*** for both teachers and learners; "Move pets and livestock in designated area of evacuation for animals" has means of **4.08** and **3.33** which entails that teachers are ***Much Knowledgeable*** than the learners who just got***Knowledgeable*** verbal description.

The average means of the respondents before the typhoon were **4.12** and **3.72** with a verbal description of ***More Knowledgeable*.** This means that the teachers and learners know what to do before the typhoon.

Table 19
During Typhoon

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Don't panic. Stay inside the house and keep oneself updated with the latest weather news.	4.29	VMK	3.95	MK
Disable or unplug main electrical switches and water valve.	4.21	VMK	3.67	MK
Keep flashlight and emergency lamp handy. Take extra care in using gas lamps and candles.	4.18	MK	3.89	MK
Do not stay near glass windows.	4.14	MK	3.79	MK
Never walk through flooded areas to avoid getting water-borne infections. Wear raincoats, boots and other protective equipment if crossing flooded area is inevitable.	4.21	VMK	3.85	MK
Ave. Weighted Mean	4.21	VMK	3.83	MK

Legend:

4.21- 5.00	Very Much Knowledgeable
3.41- 4.20	Much Knowledgeable
2.61- 3.40	Knowledgeable
1.81- 2.60	Less Knowledgeable
1.00- 1.80	Not Knowledgeable

Table 20
After Typhoon

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Return to your home only when authorities tell you it is safe to do so.	4.32	VMK	4.03	MK
Do not stay near areas with damaged structures, power line or fallen trees.	4.32	MK	3.97	MK
Check and repair damages parts of the house with extra care.	4.14	MK	3.69	MK
Make sure electrical outlets and appliances are not wet before turning the electricity on.	4.22	VMK	3.75	MK
Empty cans, tires and pots with rainwater to prevent mosquitoes form breeding.	4.24	VMK	3.87	MK
Ave. Weighted Mean	4.25	VMK	3.86	MK

Earthquake

The teacher and learner respondents were assessed on their level of awareness on what to do before, during and after earthquake

Before Earthquake. Table 21 reflects the data of the teacher and learner respondents before earthquake. The practices needed to do before earthquake are "Check the integrity of the house and do necessary repairs" has means of **3.86** and **3.80** which means the teachers and the learners were ***Much Knowledgeable*** on it; "Keep flammable and toxic chemicals in safe places" has means **4.17** and **3.42** which denotes that the respondents were ***Much Knowledgeable*** of the said practice; "Keep hanging objects and heavy furniture secure" got means of **4.04** and

3.50 where it implies the respondents were Much Knowledgeable on it; "Keep family emergency bag with items for survival handy" has means 4.17 and 4.00 where the respondents were also ***Much Knowledgeable*** on the said practice.; "Take part in earthquake drills in office, school and community" has means of **4.27** and **4.41** which means that the respondents were ***Very Much Knowledgeable*** of the said practice.

Table 21
Before Earthquake

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Check the integrity of the house and do necessary repairs.	3.86	MK	3.80	MK
Keep flammable and toxic chemicals in safe places.	4.17	MK	3.42	MK
Keep hanging objects and heavy furniture secure.	4.04	MK	3.50	MK
Keep family emergency bag with items for survival handy.	4.17	MK	4.00	MK
Take part in earthquake drills in office, school and community.	4.27	VMK	4.41	VMK
Ave. Weighted Mean	4.10	MK	3.83	MK

The totality of the respondents' responses had a verbal description of Much Knowledgeable with average weighted means of 4.10 and 3.83 respectively. This implies that the teachers and learners know what to do before the earthquake.

During Earthquake. This part is considered one essential practice whenever earthquake may occur. Knowing the unpredictable nature of this disaster, everyone must be prepared. Table 22 speaks the preparedness of the respondents during earthquake.

Table22
During Earthquake

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
When indoors, duck under a strong table and hold on to it while staying calm and alert for possible threats.	4.24	VMK	4.29	VMK
Do not stay near shelves, heavy objects and glass windows and doors.	4.20	MK	3.97	MK
When the shakings stop, go out of the building and stay in area designated for evacuation.	4.17	MK	4.03	MK
When outdoors, don't stay near buildings, electric posts, trees, and landslide-prone locations.	4.12	MK	4.22	VMK
When inside moving vehicle, stop and go out of the vehicle.	4.06	MK	3.63	MK
Ave. Weighted Mean	4.16	MK	4.03	MK

Data revealed that the respondents were ***Very Much Knowledgeable*** on the practice pertaining to "When indoors, duck under a strong table and hold on to it while staying calm and alert for possible threats" with means of **4.24** and **4.29.** Moreover, they were **Much Knowledgeable** on "Do not stay near shelves, heavy

objects and glass windows and doors", When the shakings stop, go out of the building and stay in area designated for evacuation", with means of **4.20, 3.97, 4.17** and **4.03**. The practice on "When outdoors, don't stay near buildings, electric posts, trees, and landslide-prone locations" showed varied response but still denotes ***Much Knowledgeable*** for the teachers and ***Very Much Knowledgeable*** for learners. Moreover, the teachers and learners were ***Much Knowledgeable*** on "When inside moving vehicle, stop and go out of the vehicle" with means of **4.06** and **3.63.**

The totality of the data lead to ***Much Knowledgeable*** response both from teachers and learners.

After Earthquake. The respondents were also assessed on their level of awareness after the earthquake. It was observed from table 23 that the respondents were Much Knowledgeable on "Check yourself and others for possible injuries and provide first aid if needed" with means 4.20 and 3.83. The same response with "Remove spills of flammable and toxic chemicals if there is any"and "Stay outdoors until advised by authorities that it is safe to return" with means of 4.01, 3.16, 4.20 and 3.80. Meanwhile, they differ on their responses pertaining to "Evacuate to elevated or higher ground immediately if there is a threat of a tsunami especially those living in coastal area" and "Ensure there are no damages in water and electrical lines or leaks of gas or LPG" since the teachers were responding Much

Knowledgeable and Very Much Knowledgeable with means 4.14 and 4.27 respectively while the other one is Knowledgeable and Much Knowledgeable for the learners' responses with means 3.39 and 3.43.

The overall response showed that the respondents were Much Knowledgeable on what do after the earthquake with the means of 4.20 and 3.80 respectively.

Table 23
After Earthquake

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Check yourself and others for possible injuries and provide first aid if needed.	4.20	MK	3.83	MK
Evacuate to elevated or higher ground immediately if there is a threat of a tsunami especially those living in coastal areas.	4.14	MK	3.39	K
Remove spills of flammable and toxic chemicals if there is any.	4.01	MK	3.16	MK
Stay outdoors until advised by authorities that it is safe to return.	4.20	MK	3.80	MK
Ensure there are no damages in water and electrical lines or leaks of gas or LPG.	4.27	VMK	3.43	MK
Ave. Weighted Mean	4.16	MK	3.52	MK

Table 24 is supposedly for other calamities; however, the indicated schools were not able to experience other calamities.

Table 24
Other Calamities

Practices	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
None				
Ave. Weighted Mean				

EXTENT OF ACTIVITIES THAT ENHANCED THE AWARENESS OF THE DRR

This part provides the teachers' and learners' level of awareness on disaster risk reduction activities as to Lecture and Video presentation; Picture and Story Show; Drawing and Coloring; DRR Jingle and Evacuation Drills.

Lecture and Video Presentation

The respondents were assessed their knowledge on the lecture and video presentation. Reflected from the table 25 is the data on the said activity related to DRR.

Table 25
Lecture and Video Presentation

Activities	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Brief lecture on the safe and danger situations.	3.59	ME	3.06	E
Discussion on how to protect oneself from common threats with basic necessary actions.	3.44	ME	3.15	E
Lecture on structural and non-structural mitigation at home and school by resource speakers or technical experts.	3.38	E	3.24	E
Video presentation on how to prepare mitigate the impact of common hazards including protecting oneself.	3.40	E	3.41	ME
Film documentaries and movies related to natural hazards and the mechanisms on how it can happen.	3.41	E	2.83	E
Ave. Weighted Mean	3.44	E	3.14	E

The activity "Brief lecture on the safe and danger situations" got means of 3.59 for teachers and 3.06 for learners with verbal descriptions of ***Much Enhanced*** and ***Enhanced***respectively. Moreover, "Lecture on how to protect oneself from common hazards by knowing basic actions that are necessary" had means of **3.44** and **3.15** which entails that the teachers were ***Much Enhanced*** while learners were ***Enhanced*** on the said activity. Both of the respondents had the same response on "Lecture on structural and non-structural mitigation at home and school by resource speakers or technical experts" which they answered ***Enhanced*** on the said item with means of **3.38** and **3.24**. Furthermore, "Video presentation on how to

prepare mitigate the impact of common hazards including protecting oneself" had means of **3.40** and **3.41** which means the teachers were ***Enhanced*** while the learners were ***Much Enhanced*** on their knowledge to DRR because of the said activity. Meanwhile, the "Film documentaries and movies related to natural hazards and the mechanisms on how it can happen" got the same responses from the respondents which is Enhanced with means of **3.41** and **2.83**.

The data from table 23 implies that with the aid of Lecture and Video Presentation the teachers and the learners' knowledge on DRR were ***Enhanced***.

Picture and Story Show

The respondents were assessed based on their knowledge on picture and story show as it was related to DRR related concepts.

Table 26 summarized the data related to this activity. Activities pertaining to this item are "Showing pictures of directional signage and explaining their meaning (e.g. exit signs, evacuation map, danger signs, warning signs, etc." had means of **3.54** and **3.31**. This signifies that the teachers were ***Much Enhanced*** compared to the learners who are ***Enhanced***. The "Introduction of DRR Education mascot (e.g. Juan Handa, Lily Ligtas) for familiarization and to learn how to associate these characters as symbols of being prepared for disasters" got means of **3.29** and **2.06**. It denotes the teachers had ***Enhance*** Knowledge on the aid activity while the learners were less ***Enhanced***. For the "Demonstration using DRR

Education miniature models to visualize the risks and impacts of disasters", it shows that the teachers were ***Enhanced*** while the leaners were Less enhanced with means of **3.28** and **2.59**. It has the same findings with "Story telling on the risks and impacts of common disasters that is appropriate to the children's level of comprehension" and "Using puppet shows to explain about protecting oneself from hazards and the importance of following simple rules and instructions". With their corresponding means of **3.39, 2.49, 3.25** and **2.37**.

Table 26
Picture and Story Show

Activities	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Showing pictures of directional signage and explaining their meaning (e.g. exit signs, evacuation map, danger signs, warning signs, etc.)	3.54	ME	3.31	E
Introduction of DRR Education mascot (e.g. Juan Handa, Lily Ligtas) for familiarization and to learn how to associate these characters as symbols of being prepared for disasters.	3.29	E	2.06	LE
Demonstration using DRR Education miniature models to visualize the risks and impacts of disasters.	3.28	E	2.59	LE
Story telling on the risks and impacts of common disasters that is appropriate to the children's level of comprehension.	3.39	E	2.49	LE
Using puppet shows to explain about protecting oneself from hazards and the importance of following simple rules and instructions	3.25	E	2.37	LE
Ave. Weighted Mean	3.35	E	2.56	LE

The totality of the responses was ***Enhanced f***or teachers and Less Enhanced for learners with means of **3.35** and **2.56**. This simply means that the learners need to enhance their knowledge pertaining to picture and story show so that they will be able to ready more themselves when calamities arise.

Drawing and Coloring

Table 27 showed the data on the respondents' knowledge on drawing and coloring. It reflects on the table that most of the teachers' responses on drawing and coloring were Enhanced with the means **3.30, 3.32, 3.35** and **3.31** on items pertaining to "Drawing the risks and impacts in case a natural disaster happens to their municipality/city", "Coloring basic signages according to the standard mandatory for particular sign", "Coloring the different types of natural disasters (typhoon, earthquake, etc), "Slogan making activity focusing on disaster preparedness and mitigation measures on all types of natural hazards". Furthermore, "Making a poster related to disaster risk reduction" got a mean of 3.49 which signifies Much Enhanced knowledge in the specified area. For learners' responses, three activities got an***Enhanced***verbal description. The said activities were "Coloring the different types of natural disasters (typhoon, earthquake, etc)', "Drawing the risks and impacts in case a natural disaster happens to their

municipality/city", "Slogan making activity focusing on disaster preparedness and mitigation measures on all types of natural hazards" with the means of **2.54,2.47** and **2.57**. Meanwhile, "Coloring the different types of natural disasters (typhoon, earthquake, etc) and Making a poster related to disaster risk reduction got means of **2.65** and **3.13** which denotes ***Enhanced*** knowledge on the said activities.

The totality of the means got **3.35** for teachers which means they are **Enhanced** while the learners got **2.67** which also pertains to **Enhanced** Knowledge.

Table 27
Drawing and Coloring

Activities	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Drawing the risks and impacts in case a natural disaster happens to their municipality/city.	3.30	E	2.52	LE
Coloring basic signages according to the standard mandatory for particular sign.	3.32	E	2.47	LE
Coloring the different types of natural disasters (typhoon, earthquake, etc)	3.35	E	2.65	E
Making a poster related to disaster risk reduction	3.49	ME	3.13	E
Slogan making activity focusing on disaster preparedness and mitigation measures on all types of natural hazards.	3.31	E	2.57	LE
Ave. Weighted Mean	3.35	E	2.67	E

DRR Jingle

All the teachers' responses on the activities pertaining to DRR Jingle got a verbal description of ***Enhanced*** while the learners' responses vary since they ***have Less Enhanced*** on items "Creating music to unite, inspire and engage learners to cooperate in disaster preparedness activities" and "Creating a rap with the lines of the song telling about different ways of lessening the impact of disasters" with means of **2.43** and **2.37** while ***Enhanced*** on activities pertaining to "Composition of DRR jingle about natural hazards with analysis and explanation of its causes and mechanisms" and "Learning the DRR song in Local dialect to depict the importance of disaster preparedness and mitigation" with means of **3.31** and **3.04**.

The totality of the responses showed only ***Enhanced*** knowledge on DRR Jingle both from teachers and learners.

Table 28
DRR JINGLE

Activities	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Composition of DRR jingle about natural hazards with analysis and explanation of its causes and mechanisms.	3.20	E	3.31	E
Creating music to unite, inspire and engage learners to cooperate in disaster preparedness activities.	3.15	E	2.43	LE
Creating a rap with the lines of the song telling about different ways of lessening the impact of disasters.	3.08	E	2.37	LE
Listening and memorizing the DRR jingle	3.20	E	3.75	ME

and recognizing the lyrics of the song to associate the importance of disaster preparedness.				
Learning the DRR song in Local dialect to depict the importance of disaster preparedness and mitigation.	3.26	E	3.04	E
Ave. Weighted Mean	3.18	E	2.98	E

Evacuation Drill

Table 29 reflects the knowledge of the teachers and learners when it comes to evacuation drill. The table speaks how the teachers and learners have ***Much Enhanced*** knowledge on the items enumerated on the table. It only varies on the other responses of the learners such "Participating the DROP-COVER-HOLD technique during earthquake drill" which the learners were ***Very Much Enhanced***. This probably because of the earthquake drills conducted on schools quarterly. Moreover, "Simulating the real scenario if in case someone is trapped inside the building (e.g. search and rescue, giving first aid and etc.)" got a mean of **3.37** which denotes ***Enhanced*** knowledge on the said item.

Table 29
EVACUATION DRILL

Activities	Teachers' Responses		Learners' Responses	
	WM	VD	WM	VD
Participating the DROP-COVER-HOLD technique during earthquake drill.	3.96	ME	4.23	VME
Familiarizing the learner on the school surroundings of the safe and danger areas including where to evacuate in case a disaster happens. Showing the nearest exits from their classroom and evacuation routes	4.01	ME	3.84	ME

in school grounds.				
Demonstrating on the proper behavior during evacuation drills (e.g. do not panic and do not push other people and evacuating in an orderly manner.	4.08	ME	4.00	ME
Assigning individuals to do the head count during evacuation drills and explaining its importance.	4.02	ME	3.91	ME
Simulating the real scenario if in case someone is trapped inside the building (e.g. search and rescue, giving first aid and etc.)	3.89	ME	3.37	E
Ave. Weighted Mean	3.99	ME	3.87	ME

The overall responses were***Much Enhanced*** knowledge on evacuation drill with means **3.99** and **3.87**.

Stress debriefing

Though the indicated schools are aware that there is a stress debriefing program after the calamities or disaster, since the schools have not experience yet, there is no table allotted for the said activity.

SIGNIFICANT RELATIONSHIP BETWEEN THE INDICATED INFORMATION AND THE IMPLEMENTATION OF DRRE

Table 30

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.000[a]	1	.157		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	2.773	1	.096		
Fisher's Exact Test				1.000	.500
Linear-by-Linear Association	1.000	1	.317		
N of Valid Cases[b]	2				

The above data is one of the crosstabs results to test the significant relationship between the indicated information and the implementation of DRRE. Results showed not significant. This implies no significant relationships between the compared variables.

SIGNIFICANT MEAN DIFFERENCE IN PERCEPTION BETWEEN THE TWO GROUPS OF RESPONDENTS ON THE EXTENT OF ACTIVITIES THAT ENHANCED THE AWARENESS OF DRR

This part of the study tests whether there is a significant mean difference between the perceptions of the groups of respondents on the extent of activities that enhanced the awareness of DRR as shown on Table 31

Table 31
Perception of the Respondents

Extent of Activities	Mean	Standard Deviation	Computed t-Value	P -value	Decision
Learners	3.04	0.52	3.127	0.035	Significant
Teachers	3.46	0.31			

The table above further shows the perception of two groups related to the extent activities that enhanced the awareness of DRR. The learners had a mean of **3.04** among all their perceptions that enhanced the awareness of DRR while the teachers got **3.46** which means there is a ***Significant*** mean difference between the teachers' and learners' perceptions.

This implies that the DRRE activities integration of the indicated schools need to be enhanced further.

Chapter 3

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary, findings, conclusions and recommendations of the study which involved the teachers and the learners of Bakilid Elementary School, Cabancalan Elementary School and Maguikay Elementary School.

SUMMARY

The study aimed to assess the implementation of the Disaster Risk Reduction Education (DRRE) in Bakilid Elementary School, Cabancalan Elementary School and Maguikay Elementary School, school year 2019-2020 with the use of a validated questionnaire from DepEd. The randomly selected 150 learners and 133 teachers of the indicated schools were the respondents of the study. To elaborate further the purpose of the study, the researchers sought to answer the information related to the teachers' age and gender, area of specialization, teaching experience, related DRR trainings and seminars attended, learners' age and gender, their involvement of DRRE activities, schools' record of DRR occurrences and resources. Furthermore, the research also aimed to identify the level of awareness of the teachers and learners in common disasters such as fire, flood, typhoon, earthquake and other calamities. In addition to these, it also

assessed the extent of the DRRE activities such as lecture and video presentation, picture and story show, DRR drawing and coloring and DRR jingle, evacuation drill and stress debriefing. The significant difference in perceptions between the two groups of respondents were determined so with the significant relationship between the indicated information and the extent of implementation of DRRE.

FINDINGS

The study revealed that majority of the teacher respondents were on the age range of 31-40 years old. In terms of the gender, 11 teachers are male while 122 teachers are female. The teacher respondents' field of specialization are mostly BEED with a total number of 129. The 39 total teachers had teaching experience of 11-15 years and below while 12 of them had an experience of an experience of 16-20 years. The enumerated trainings attended by these teacher respondents were Training TOT Workshop, Basic Incident, Occupational First Aid, 1st DRRM Evaluation, Capability Building and Training Workshop. Meanwhile, 75 of the learner profile respondents are of the age 13-14 while the rest of the 75, aged 11-12. In terms of their gender, 97 out of 150 are females while 53 are males. The learner respondents also attended various DRR activities. 106 of them attended the lecture and video presentation, 100 of them participated on picture story, 26 of them on DRR drawing, !43 on DRR Jingle, 141 learners on the evacuation drills,

39 of them on DRR reading, 41 learners on DRR writing, 90 of them on DRR school watching, the 15 students attended the DRR memorial, DRR Card as well was joined by 8 learners and 29 of the learners participated the emergency cooking. In lieu with the DRR awareness, the indicated schools have existing DRR Resources. Among those are Fire Extinguisher, emergency lamps, emergency lights, flashlights, boots, helmets, megaphones, medicine kit and reflector vest.

When the level of the respondents' awareness on various disasters were evaluated, it was found out that before the fire, the teachers got ***Much Knowledgeable*** while the learners were ***Very Much Knowledgeable***, during the fire both of the respondents revealed ***Much Knowledgeable***, while after the fire the teachers were ***Much Knowledgeable*** compared with the students who only got K***nowledgeable***. This means that the students need more awareness on the said indicator. For flood, data showed that the teachers were Much Knowledgeable than the students since they are only Knowledgeable on what to do during the said disaster, during the flood the teachers had ***Very Much Knowledgeable*** while the teachers were ***Much knowledgeable***. After the flood, the teachers and students were ***Much Knowledgeable.*** This can be because aside from they are well oriented, they had practiced the said awareness activities. On the disaster before typhoon, both teachers and learners were ***Much Knowledgeable***. During the typhoon, the teachers were ***Very Much Knowledgeable*** while the leaners were ***Much***

Knowledgeable. Moreover, after the typhoon, the teachers still were ***Very Much Knowledgeable*** while the learners were ***Much Knowledgeable***. In addition to the disasters, before the earthquake the teachers and learners were ***Much Knowledgeable***., so with during the earthquake, and after the earthquake. This can be because of the constant earthquake drills done in schools. Aside from those calamities mentioned, there are no other calamities the schools have experienced to be evaluated in terms of awareness.

Reading on the enrichment activities to maximize DRR awareness, Lecture and Video Presentation got an ***Enhanced*** response from both teachers and learners, picture and story show got ***Enhanced*** from teachers and ***Less Enhanced*** from learners, drawing and coloring activity made teachers and learners both ***Enhanced***. For DRR jingle, both teachers and learners were Enhanced by the activity on DRR, on the evacuation drill, they were ***Much Engaged***. No data on stress debriefing since the school have not experience yet the said calamities.

On the data pertaining to the significant relationship between the indicated information and the implementation, it shows that there is no significant difference between the two meaning the profile can't affect the responses of the teachers and learners. Meanwhile, on the significant difference between the perception, it showed that there is a significant difference which means that the responses of the two varies.

CONCLUSION

Based on the data revealed from the study, it is concluded that DRR activities are needed to be strengthen more in order for the teachers and students to increase their level of awareness on the indicated disasters. With this, in times of disasters, people will respond immediately to certain disasters.

RECOMMENDATION

Based on the findings and conclusion of the study, it is hereby recommended that the coping response mechanism be implemented.

Chapter 4

Output of the Study

This chapter presents the output of the study.

Rationale

The safety of the teachers and learners has always been one the concern of the school. Due to the different disaster which may occur anytime, it is essential to be prepared. Mostly, people just focus on the during the disaster. With the inputs of the data gathered from the study, it is important as well to be prepared before, during and after the disaster.

Based on the study, it was found out that the respondents' awareness on various disasters vary. It is important to enrich the activities to strengthen the mentioned awareness. Despite some results that were also good, there is still a necessity to intensify the school-based disaster and risk reduction coping response

Objectives

The DRR awareness coping response is designed to strengthen the level of awareness both of the teachers and learners of Bakilid Elementary School, Cabancalan Elementary School and Maguikay Elementary School, Division of Mandaue City. Moreover, it helps students more involved not only in the activities

but also to help the worsening problem of the country which can be the cause of the disaster, the climate change.

Target Participants

All the learners and teachers of the indicated schools, Bakilid Elementary School, Cabancalan Elementary School and Maguikay Elementary School of Mandaue City Division. It can also be applicable to other schools.

DRR COPING RESPONSE MECHANISM

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DELIA C. FLORES

DISASTER AND RISK REDUCTION COPING RESPONSE

Areas of Concern	Objectives	Strategies	Persons Involved	Budget	Source of Budget	Time Frame	Expected Outcome	Actual Accomplishments	Remarks
A.DRRE Awareness Monthly Advocacy	1. To strengthen the learners' awareness on DRR. 2. To make learners' involve of the DRR activities to maximize their skills as they apply it to disaster prevention. 3. To make students aware of the cause of disaster	1. Provide monthly activities related to DRR. 2. Integrate lessons which may apply. 3. Short monthly talk on the updates of the disaster risk related news.	Learners, Teaching and non-teaching	30,000	PTA Fund MOOE	June2020-March2021	-Outputs from monthly activities Trivia results during the conduct of the activity	Pictures/Videos	
B. Learners and teachers DRRE Community	1. Participate in the community	1. Communicate with the barangay about their activities on DRR for students to participate	Learners, Teaching and non-teaching	20,000	PTA Fund MOO	June2020-Mar	Brgy. Documentation	Pictures/Video	

Involvement	programs relevant to DRR activities 2. Involve the students to programs of the community about climate change.	2. Include the barangay activities on the advocacy campaign so learners are aware. 3. Give rewards to learners who are participating the programs regarding DRRE in the community to encourage them to participate more			E	ch2021	Certificate of Participation	s	
C. Tie up linkages that would help the school strengthen its program on DRR	1. To look for support coming from Non-government organization in terms of the schools' programs relevant to DRR	1. Look for possible partners that would help the school in achieving its goals regarding DRRE.	Learners, Teaching and non-teaching	20,000	PTA Fund MOOE	June2020-March2021	Presence of the linkage partners	Pictures/Videos	

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APPENDICES

APPENDIX A

TRANSMITTAL LETTER

DR. NIMFA D. BONGO
Schools Division Superintendent
Mandaue City Division

Madame:

Greetings of Peace!

We are currently having our thesis writing entitled, "INTENSIFYING SCHOOL-BASED DISASTER AND RISK REDUCTION COPING RESPONSE". In lieu of this, we would like to conduct our research in your division. This would be a great help not only in our compliance for us graduate but to intensify the risk reduction awareness of the respective schools for future preparations during natural disasters.

We assure confidentiality in every detail of the respondents' identity. We look forward for the positive response in this matter.

Thank you!

Truly yours,

Noted:

MERVIN D. BALASUELA

MAE NERI N. BALASUELA

RUFINO T. TUDLASAN, JR., Ph.D.
Adviser

DELIAC.FLORES

Researchers

Approved:

NIMFA D. BONGO, Ed.D. CESO V
Schools Division Superintendent
Mandaue City

APPENDIX B

SURVEY QUESTIONNAIRE FOR THE TEACHER RESPONDENTS

SURVEY QUESTIONNAIRE FOR THE TEACHER RESPONDENTS

(The survey Questionnaire was enhanced in reference to the materials sourced from the Office of Civil Defense and Dep Ed Memo on DRR Education)

PART 1. TEACHER'S PROFILE

Name: _____

Age: 51 years old and above ☐

41-50 years old ☐

31-40 years old ☐

21-30 years old ☐

Below 20 years old ☐

Gender: Male ☐ Female ☐

Field of Specialization: BEED ☐ Major in_____

BSED ☐ Major in _____

OTHERS: _____

(Please Specify)

Teaching Experience: 21 years and above ☐

16-20 years ☐

11-15 years ☐

6-10 year ☐

Below 5 years ☐

Title of DRRE Trainings and Seminars Attended:

Training of Trainers (TOT) Workshop on Disaster Risk Reduction Education Integration to I-plans and Capacity Building for School Heads, Master Teachers and DRRM School Coordinators ☐

Basic Incident Command System ☐

Occupational First Aid training for Teachers ☐

1st Division DRRM Evaluation, Planning and Consultation Worksh For School DRRM Coordinator ☐

Capability Building Training on Disaster Risk Reduction Educatio And Contingency Planning ☐

Training Workshop on Disaster Risk Reduction Education for Promotion Schools ☐

Part II. TEACHERS' AWARENESS ON VARIOUS DISASTERS

Instruction:

Please answer the following statements below by checking (/) the appropriate box that corresponds to your choice.

Legend:

5- Very Well Knowledgeable
4- Well Knowledgeable
3- Knowledgeable
2- Less Knowledgeable
1- Not Knowledgeable

DISASTERS	INDICATORS	RATING				
		5	4	3	2	1
1.FIRE	BEF0RE					
	1. Don't block the area with trash or storage junk.					
	2. Ready the emergency kit and the first aid box at all times.					
	3. Keep a 3 feet-distance between heaters and anything than my burn.					
	4. Never use burned switches or damaged extension wires.					
	5. Unplug electronic appliance that emits smoke or produces unusual smell.					
	DURING					
	1. Stop, drop, and roll if your clothes are on fire until the fire is out.					
	2. Scream for help but never run as running makes the burning faster.					
	3. Use carpet, blanket or any handy thick material to cover the person on fire.					
	4. Contact the fire department right away.					
	5. Try to control or stop one of the elements that cause fire: Heat , Fuel and Oxygen					
	AFTER					
	1. Immediately soak the wound under cool water for 10-15 minutes if someone gets burned and consult a doctor when blisters appear on the burned area.					
	2. Advise someone who has inhaled smoke or fumes to see a doctor for medical attention.					
	3. Remove pieces of jewelry or clothing around the burned area of the skin but never remove object stuck on the affected area to avoid further damage.					
	4. Once already outside of the burning building, for any reason, never go back inside.					
	5. Go back inside only when someone from					

	the fire department has declared the place safe for re-entry..					
2. FLOOD	BEFORE					
	1. Familiarize the early warning for imminent flood and the community's evacuation plan.					
	2. Take part in the flood preparedness drills and activities in the community.					
	3. Transfer essential home items to the upper floors.					
	4. Keep the family emergency bag with items for survival handy.					
	5. Move pets and livestock in designated evacuation areas for animals.					
	DURING					
	1. Stay in elevated area and keep oneself updated with the latest news on weather.					
	2. Never touch any electrical equipment with wet hands or when standing in floodwater.					
	3. Never go boating or swimming if the rivers are swollen.					
	4. Avoid crossing rivers or streams whose water is above the knee.					
	5 Never pass or drive through areas soaked or covered in flood					
	AFTER					
	1. Return home from the evacuation area only when authorities say it is already safe to do so.					
	2. Report to the proper authorities any sightings of fallen trees and electric posts.					
	3. Before turning on electricity, ensure electrical wirings and appliances are not wet.					
	4. Check for damages in the house for necessary repairs.					
	5. Ensure that drinking water is not contaminated by or mixed with flood water.					
3. TYPHOON	BEFORE					
	1. Keep oneself posted with the latest weather updates.					

	2. Familiarize the early warning signals and the community's evacuation plans.					
	3. Ensure the sturdiness of your house and repair or strengthen the parts that may not stand the typhoon.					
	4 Keep the family emergency bag with items for survival handy.					
	5. Move pets and livestock in designated area of evacuation for animals.					
	DURING					
	1. Don't panic. Stay inside the house and keep oneself updated with the latest weather news.					
	2. Disable or unplug main electrical switches and water valve.					
	3. Keep flashlight and emergency lamp handy. Take extra care in using gas lamps and candles.					
	4. Do not stay near glass windows.					
	5. Never walk through flooded areas to avoid getting water-borne infections. Wear raincoats, boots and other protective equipment if crossing flooded area is inevitable.					
	AFTER					
	1. Return to your home only when authorities tell you it is safe to do so.					
	2. Do not stay near areas with damaged structures, power line or fallen trees.					
	3. Check and repair damages parts of the house with extra care.					
	4. Make sure electrical outlets and appliances are not wet before turning the electricity on.					
	5. Empty cans, tires and pots with rainwater to prevent mosquitoes form breeding.					
4. EARTHQUAKE						
	BEFORE					
	1. Check the integrity of the house and do necessary repairs.					

	2. Keep flammable and toxic chemicals in safe places.					
	3. Keep hanging objects and heavy furniture secure.					
	4. Keep family emergency bag with items for survival handy.					
	5. Take part in earthquake drills in office, school and community.					
	DURING					
	1. When indoors, duck under a strong table and hold on to it while staying calm and alert for possible threats.					
	2. Do not stay near shelves, heavy objects and glass windows and doors.					
	3. When the shakings stop, go out of the building and stay in area designated for evacuation.					
	4. When outdoors, don't stay near buildings, electric posts, trees, and landslide-prone locations.					
	5. When inside moving vehicle, stop and go out of the vehicle.					
	AFTER					
	1. Check yourself and others for possible injuries and provide first aid if needed.					
	2. Evacuate to elevated or higher ground immediately if there is a threat of a tsunami especially those living in coastal areas.					
	3. Remove spills of flammable and toxic chemicals if there is any.					
	4. Stay outdoors until advised by authorities that it is safe to back home.					
	5. Ensure there are no damages in water and electrical lines or leaks of gas or LPG.					

Part III. LEVEL OF AWARENESS ON DISASTER RISK REDUCTION ACTIVITIES

Instruction:

Please assess your awareness on Disaster Risk Reduction Activities according to the indicators below. Kindly indicate your rating of the following items by putting a check mark (/) in the box that corresponds to your answer. Please refer to the following rating scale:

Legend:

5- Very Much enhanced
4- Much Enhanced
3-Enhanced
2-Less Enhanced
1-Not Enhanced

DRR Activities	INDICATORS	RATING				
		5	4	3	2	1
1. Lecture and Video presentation	1. Brief lecture on the safe and danger situations.					
	2. Discussion on how to protect oneself from common threats with basic necessary actions.					
	3. Lecture on structural and non-structural mitigation at home and school by resource speakers or technical experts.					
	4. Video presentation on how to prepare mitigate the impact of common hazards including protecting oneself.					
	5. Film documentaries and movies related to natural hazards and the mechanisms on how it can happen.					
2. Picture and Story Show	1. Showing pictures of directional signage and explaining their meaning (e.g. exit signs, evacuation map, danger signs, warning signs, etc.)					
	2. Introduction of DRR Education mascot (e.g. Juan Handa, Lily Ligtas) for familiarization and to learn how to associate these characters as symbols of					

	being prepared for disasters.					
	3. Demonstration using DRR Education miniature models to visualize the risks and impacts of disasters.					
	4. Story telling on the risks and impacts of common disasters that is appropriate to the children's level of comprehension.					
	5. Using puppet shows to explain about protecting oneself from hazards and the importance of following simple rules and instructions					
3. Drawing and Coloring	1. Drawing the risks and impacts in case a natural disaster happens to their municipality/city.					
	2. Coloring basic signages according to the standard mandatory for particular sign.					
	3. Coloring the different types of natural disasters (typhoon, earthquake, etc)					
	4. Making a poster related to disaster risk reduction					
	5. Slogan making activity focusing on disaster preparedness and mitigation measures on all types of natural hazards.					
4. DRR Jingle	1. Composition of DRR jingle about natural hazards with analysis and explanation of its causes and mechanisms.					
	2. Creating music to unite, inspire and engage learners to cooperate in disaster preparedness activities.					
	3. Creating a rap with the lines of the song telling about different ways of lessening the impact of disasters.					
	4. Listening and memorizing the DRR jingle and recognizing the lyrics of the song to associate the importance of disaster preparedness.					
	5. Learning the DRR song in Local dialect to depict the importance of disaster preparedness and mitigation.					
5. Evacuation	1. Participating the DROP-COVER-HOLD					

Drill	technique during earthquake drill.					
	2. Familiarizing the learner on the school surroundings of the safe and danger areas including where to evacuate in case a disaster happens. Showing the nearest exits from their classroom and evacuation routes in school grounds.					
	3. Demonstrating on the proper behavior during evacuation drills (e.g. do not panic and do not push other people and evacuating in an orderly manner.					
	4. Assigning individuals to do the head count during evacuation drills and explaining its importance.					
	5. Simulating the real scenario if in case someone is trapped inside the building (e.g. search and rescue, giving first aid and etc.)					

APPENDIX C

SURVEY QUESTIONNAIRE FOR THE LEARNER RESPONDENTS

(The survey Questionnaire was enhanced in reference to the materials sourced from the Office of Civil Defense and DepEd Memo on DRR Education)

PART 1. LEARNER'S PROFILE

Age: _____

Gender: Male ☐ Female ☐

Participation on DRR Activities:

Lecture and Video Presentation	☐	DRR Writing	☐
Picture and Story Show	☐	DRR School Watching	☐
DRR Drawing and Coloring	☐	DRR Memorial Corner Making	☐
DRR Jingle	☐	DRR Calculating	☐
Evacuation Drills	☐	DRR Card/ Board Game	☐
DRR Reading	☐	Emergency Cooking	☐

Part II. LEARNER'S LEVEL OF AWARENESS ON VARIOUS DISASTERS

Instruction:

Please answer the following statements below by checking (/) the appropriate box that corresponds to your choice. Please refer to scales that correspondsto the number of your choice.

Legend:

5- Very Well Knowledgeable
4- Well Knowledgeable
3- Knowledgeable
2- Less Knowledgeable
1-Not Knowledgeable

DISASTERS	INDICATORS	RATING				
		5	4	3	2	1
1.FIRE	BEF0RE					
	1. Don't block the area with trash or storage junk.					
	2. Ready the emergency kit and the first aid box at all times.					
	3. Keep a 3 feet-distance between heaters and anything than my burn.					
	4. Never use burned switches or damaged extension wires.					
	5. Unplug electronic appliance that emits smoke or produces unusual smell.					
	DURING					
	1. Stop, drop, and roll if your clothes are on fire until the fire is out.					
	2. Scream for help but never run as running makes the burning faster.					
	3. Use carpet, blanket or any handy thick material to cover the person on fire.					
	4. Contact the fire department right away.					
	5. Try to control or stop one of the elements that cause fire: Heat , Fuel and Oxygen					
	AFTER					
	1. Immediately soak the wound under cool water for 10-15 minutes if someone gets burned and consult a doctor when blisters appear on the burned area.					
	2. Advise someone who has inhaled smoke or fumes to see a doctor for medical attention.					

	3. Remove pieces of jewelry or clothing around the burned area of the skin but never remove object stuck on the affected area to avoid further damage.					
	4. Once already outside of the burning building, for any reason, never go back inside.					
	5. Go back inside only when someone from the fire department has declared the place safe for re-entry..					
2. FLOOD	BEFORE					
	1. Familiarize the early warning for imminent flood and the community's evacuation plan.					
	2. Take part in the flood preparedness drills and activities in the community.					
	3. Transfer essential home items to the upper floors.					
	4. Keep the family emergency bag with items for survival handy.					
	5. Move pets and livestock in designated evacuation areas for animals.					
	DURING					
	1. Stay in elevated area and keep oneself updated with the latest news on weather.					
	2. Never touch any electrical equipment with wet hands or when standing in floodwater.					
	3. Never go boating or swimming if the rivers are swollen.					
	4. Avoid crossing rivers or streams whose water is above the knee.					
	5 Never pass or drive through areas soaked or covered in flood					
	AFTER					
	1. Return home from the evacuation area only when authorities say it is already safe to do so.					
	2. Report to the proper authorities any sightings of fallen trees and electric posts.					
	3. Before turning on electricity, ensure					

	electrical wirings and appliances are not wet.					
	4. Check for damages in the house for necessary repairs.					
	5. Ensure that drinking water is not contaminated by or mixed with flood water.					
3. TYPHOON	BEFORE					
	1. Keep oneself posted with the latest weather updates.					
	2. Familiarize the early warning signals and the community's evacuation plans.					
	3. Ensure the sturdiness of your house and repair or strengthen the parts that may not stand the typhoon.					
	4 Keep the family emergency bag with items for survival handy.					
	5. Move pets and livestock in designated area of evacuation for animals.					
	DURING					
	1. Don't panic. Stay inside the house and keep oneself updated with the latest weather news.					
	2. Disable or unplug main electrical switches and water valve.					
	3. Keep flashlight and emergency lamp handy. Take extra care in using gas lamps and candles.					
	4. Do not stay near glass windows.					
	5. Never walk through flooded areas to avoid getting water-borne infections. Wear raincoats, boots and other protective equipment if crossing flooded area is inevitable.					
	AFTER					
	1. Return to your home only when authorities tell you it is safe to do so.					
	2. Do not stay near areas with damaged structures, power line or fallen trees.					
	3. Check and repair damages parts of the house with extra care.					
	4. Make sure electrical outlets and appliances					

	are not wet before turning the electricity on.					
	5. Empty cans, tires and pots with rainwater to prevent mosquitoes form breeding.					
4. EARTHQUAKE						
	BEFORE					
	1. Check the integrity of the house and do necessary repairs.					
	2. Keep flammable and toxic chemicals in safe places.					
	3. Keep hanging objects and heavy furniture secure.					
	4. Keep family emergency bag with items for survival handy.					
	5. Take part in earthquake drills in office, school and community.					
	DURING					
	1. When indoors, duck under a strong table and hold on to it while staying calm and alert for possible threats.					
	2. Do not stay near shelves, heavy objects and glass windows and doors.					
	3. When the shakings stop, go out of the building and stay in area designated for evacuation.					
	4. When outdoors, don't stay near buildings, electric posts, trees, and landslide-prone locations.					
	5. When inside moving vehicle, stop and go out of the vehicle.					
	AFTER					
	1. Check yourself and others for possible injuries and provide first aid if needed.					
	2. Evacuate to elevated or higher ground immediately if there is a threat of a tsunami especially those living in coastal areas.					
	3. Remove spills of flammable and toxic chemicals if there is any.					
	4. Stay outdoors until advised by authorities that it is safe to back home.					

	5. Ensure there are no damages in water and electrical lines or leaks of gas or LPG.					

Part III. LEVEL OF AWARENESS ON DISASTER RISK REDUCTION ACTIVITIES

Instruction:

Please assess your awareness on Disaster Risk Reduction Activities according to the indicators below. Kindly indicate your rating of the following items by putting a check mark (/) in the corresponding number. Please refer to the following rating scale:

Legend:

5- Very Much enhanced
4- Much Enhanced
3-Enhanced
2-Less Enhanced
1-Not Enhanced

DRR Activities	INDICATORS	RATING				
		5	4	3	2	1
1. Lecture and Video presentation	1. Brief lecture on the safe and danger situations.					
	2. Discussion on how to protect oneself from common threats with basic necessary actions.					
	3. Lecture on structural and non-structural mitigation at home and school by resource speakers or technical experts.					
	4. Video presentation on how to prepare mitigate the impact of common hazards including protecting oneself.					
	5. Film documentaries and movies related to natural hazards and the mechanisms on how it can happen.					
2. Picture and Story Show	1. Showing pictures of directional signage and explaining their meaning (e.g. exit signs, evacuation map, danger signs, warning signs, etc.)					
	2. Introduction of DRR Education mascot (e.g. Juan Handa, Lily Ligtas) for familiarization and to learn how to					

	associate these characters as symbols of being prepared for disasters.					
	3. Demonstration using DRR Education miniature models to visualize the risks and impacts of disasters.					
	4. Story telling on the risks and impacts of common disasters that is appropriate to the children's level of comprehension.					
	5. Using puppet shows to explain about protecting oneself from hazards and the importance of following simple rules and instructions					
3. Drawing and Coloring	1. Drawing the risks and impacts in case a natural disaster happens to their municipality/city.					
	2. Coloring basic signages according to the standard mandatory for particular sign.					
	3. Coloring the different types of natural disasters (typhoon, earthquake, etc)					
	4. Making a poster related to disaster risk reduction					
	5. Slogan making activity focusing on disaster preparedness and mitigation measures on all types of natural hazards.					
4. DRR Jingle	1. Composition of DRR jingle about natural hazards with analysis and explanation of its causes and mechanisms.					
	2. Creating music to unite, inspire and engage learners to cooperate in disaster preparedness activities.					
	3. Creating a rap with the lines of the song telling about different ways of lessening the impact of disasters.					
	4. Listening and memorizing the DRR jingle and recognizing the lyrics of the song to associate the importance of disaster preparedness.					
	5. Learning the DRR song in Local dialect to depict the importance of disaster preparedness and mitigation.					

5. Evacuation Drill	1. Participating the DROP-COVER-HOLD technique during earthquake drill.					
	2. Familiarizing the learner on the school surroundings of the safe and danger areas including where to evacuate in case a disaster happens. Showing the nearest exits from their classroom and evacuation routes in school grounds.					
	3. Demonstrating on the proper behavior during evacuation drills (e.g. do not panic and do not push other people and evacuating in an orderly manner.					
	4. Assigning individuals to do the head count during evacuation drills and explaining its importance.					
	5. Simulating the real scenario if in case someone is trapped inside the building (e.g. search and rescue, giving first aid and etc.)					

CURRICULUM VITAE

CURRICULUM VITAE

PERSONAL BACKGROUND

Name : **MAE NERI NAPARI BALASUELA**

Nickname : Mae

Date of Birth: May 27, 1980

Address : Gk Village, San Miguel, Maguikay Mandaue City

Civil Status : Married

Wife :Mervin D. Balasuela

Parents : SegundoVilbarNapari

Josephine Quidlat Cinco

EDUCATIONAL BACKGROUND

Post Graduate	:	Cebu Technological University
		Master of Arts in Education
		Administration and Supervision
		March 2020
		Cebu Normal University
		Master of Arts in Literature
		Complete Academic Requirements
		March 2008
College	:	Cebu Normal University
		Bachelor in Elementary Education
		Music, Arts and Physical Education
		March 2001
Secondary	:	Colegio dela Inmaculada Concepcion
		Cebu City
		March 1997
Elementary	:	Mandaue City Central School
		Mandaue City
		March 1992

EXAMINATIONS TAKEN

: Licensure Examination for Teachers(2001)

Rating: 82.50

RESOURCE SPEAKER/FACILITATOR:

1. Mid-Year Inservice Training on Enhancing Teachers' Capability in Classroom Instructions, Developing Appropriate Teaching-Learning Resources

SEMINARS/TRAININGS ATTENDED:

1. Capacity Building, Kool Adventure Kamp, Balamban Cebu

AWARDS RECEIVED

1. Coach, 1st Place Winner, Photojournalism, Division Press Conference Mandaue City, 2018

SPEAKERSHIP/DEMONSTRATOR/TRAINING MANAGER/AUTHORSHIP

1. **Resource Speaker**,Classroom Management for Newly Hired Teachers, Cabancalan National High School, February 2018

CURRICULUM VITAE

PERSONAL BACKGROUND

Name : **MERVIN DESAMPARADO BALASUELA**

Nickname : VIN

Date of Birth: February 21, 1980

Address : Gk Village, San Miguel, Maguikay Mandaue City

Civil Status : Married

Wife : Mae Neri N. Balasuela

Parents : Benjamin P. Balasuela

Myrna D. Balasuela

EDUCATIONAL BACKGROUND

Post Graduate :Cebu Technological University

Master od Arts in Education

Administration and Supervision

March 2020

Cebu Normal University

Master of Arts in Education

Physical Education

Complete Academic Requirements

March 2010

College : Cebu Normal University

Bachelor in Elementary Education

Music, Arts and Physical Education

March 2001

Secondary : Liloy National High School

Liloy, Zamboanga del Norte

Elementary : Baybay Central School

Liloy, Zamboanga del Norte

EXAMINATIONS TAKEN

: Licensure Examination for Teachers(2001)

Rating: 77.60

RESOURCE SPEAKER/FACILITATOR:

2. Mid-Year Inservice Training on Enhancing Teachers' Capability in Classroom Instructions, Developing Appropriate Teaching-Learning Resources

SEMINARS/TRAININGS ATTENDED:

1. Certificate of Completion for satisfactory completing the requirements and training hours in the 3-Day Facilitator's Training Course on Mental Health Psychosocial Support (MHPSS) at Premiere Citi Suites, Capitol Site, Cebu, Dec 10-12, 2019.

AWARDS RECEIVED

1. Contestant, 4th Place – National Sci-Damath Contest, -Teacher Categor Laguna, Philippines – February 2007

SPEAKERSHIP/DEMONSTRATOR/TRAINING MANAGER/AUTHORSHIP

2. **Resource Speaker**, Division Science-DaMath Training for Teachers, July 2007.

CURRICULUM VITAE

PERSONAL BACKGROUND

Name : **DELIA CAGASAN FLORES**

Nickname : DHEL

Date of Birth: February 14, 1970

Address : Northfield Residences, Canduman, Mandaue City

Civil Status : Married

Husband : Ike B. Flores

Parents : Bernardo Cagasan Sr. (Deceased)

Antonia SefilCagasan

EDUCATIONAL BACKGROUND

Post Graduate : Cebu Technological University

Master of Arts in Education

Major in Administration and Supervision

Cebu Technological University

MJ Cuenco Avenue, Cebu City

March 2020

College : University of the Visayas

Bachelor in Elementary Education

Major in Mathematics

March 1992

Secondary : Surigao del Norte School of Arts and Trade

Surigao City, Surigao del Norte

Elementary : Cagniog Elementary School

Cagniog, Surigao City

EXAMINATIONS TAKEN

: Professional Board Examination for Teachers (1993)

Rating: 73.50

: Civil Service Sub-Professional Examination (1991)

Rating 83.17

: Principals' Test (2017)

Rating PASSED

RESOURCE SPEAKER/FACILITATOR:

1. Accomplishing Electronic Template of DepED Modified Forms
2. School Orientation/Roll-out on Continuous Improvement Program
3. MS Word Application
4. 2014 Backyard Encampment and Investiture Ceremonies
5. Mid-Tear INSET

SEMINARS/TRAININGS ATTENDED:

1. 5th International Seminar and Training of the 21st Century Teachers and School Administrators, 5th Floor EMCOR Conference Room: December 21-23, 2018
2. School Heads' Development Program(SHDP):Foundation Course,DepEdEcotech Center : October 7 –November 24, 2018
3. Enhancement Training Program for DepEd Region VII Potential Leaders, University of San Jose Recoletos Coliseum: November 27-29, 2017
4. Training of Teachers and Administrators on Cybersafety, Deped Conference Room: October 30, 2019
5. 2019 Summer INSET, Mandaue City: May 27-31, 2019
6. Training-Workshop for the Preparation of a Five Year Strategic Plan on Schools Learning Resources Management, Mandaue City Central School: December 7 and 17, 2018
7. Philippine Professional Standards for Teachers Roll-Out, Golden Prince Hotel: August 7-10, 2018
8. Fire Safety and Basic Fire Fighting Training, Cabancalan I Elementary School: March 9, 2018

AWARDS RECEIVED

1. Coach, 3rd Place – MTAP Division Oral Competition

   Mandaue City, 2017

2. Coach, 1st Place-Champion in Chess Blitz, CVRAA

   Balamban, Cebu 2015

SPEAKERSHIP/DEMONSTRATOR/TRAINING MANAGER/AUTHORSHIP

1. **Resource Speaker**, Portfolio Assessment during the District on the use of the PPST and RPMS
2. Co-Process Owner of the School CI Project
3. Editor –Final Editing and Revision of DLL with Localized and Contextualized Learning Competencies
4. Writer-Development of DLL of Grade Five Mathematics
5. Writer-Seminar-Workshop on the Development of K to 12 Performance Standards-Based Performance Assessment ModelsWriter-Development of Summative Assessment Models.