DANGEROUS FLOODING AND DISASTER RESILIENCY PARADIGM FOR CHILDREN SUSTAINABLE EDUCATION

Arvin B. Gutang, Ph.D

Professor, Former Program Chairperson Bachelor of Public Administration, Former Chairman – Disaster Resiliency Administration Committee, Davao del Norte State College
Barangay New Visayas, Panabo City, Davao del Norte Province Philippines

ABSTRACT

Floods have put billions of children in schools throughout the world in danger. Local governments in the Philippines have struggled to build disaster resilience in children's education. The study pursued to assess the views expressed by stakeholders on disaster resilience for children in the highly flood-prone areas of Davao del Norte province to determine the essential components of disaster resilience and develop a disaster resilience framework for children. The proactive program assessment technique in the exploratory qualitative descriptive analysis was used. The study made use of an interview guide protocol tool and was ethically assessed. Strauss and Glaser's grounded theory matrix to examine the data. Findings of the study revealed the following indicators hazard analysis, capacity building for disaster management, lifesaving skills, performing arts for disaster management, inclusive participation, institutional coordination and mechanism and a safer infrastructure location. These compose the grounded new framework on disaster resiliency of children sustainable education in the dangerous flooded area.

Keywords: dangerous flooding, disaster resiliency paradigm, children sustainable, education

I. INTRODUCTION

As a result of the natural disaster, one billion children aged one to fourteen are at high risk of earthquakes at school. The large number of children in danger during natural disasters such as earthquakes and floods is exceptionally high (World Bank, 2008). Disasters affect between 50 and 60 percent of children each year. One hundred million children have been harm as a result of the nearly 200 million disaster victims. According to the 2008 Kids Rights Index, the Philippines ranked 45th out of 45 countries. Worse, environmental discrimination against children, a lack of engagement, and the lowest funding given to disaster risk reduction initiatives for children (UNICEF, 2011).

Resilience describes the process of adjusting to unpleasant events, experiences, people, or civilizations. It means that adversity has been well adjusted, in significant part (Rivers Et al., 2016). Participation of children in disaster risk reduction activities includes in new policy discussions. When children are not recognized, the entire community suffers (Manyena et al., 2008). Children's involvement in families, schools, cultural or religious activities, and extracurricular activities may enhance their resilience. When children think they are important and appreciated for their efforts, their resilience grows (Gurwitch et al., 2007).

The SENDAI Framework for Disaster Risk Reduction 2015-2030 requires broad society participation and cooperation it must be empowered, inclusive, accessible, and non-discriminatory UNIDSR (2012). The Hyogo 2005 Action Framework stresses disaster resilience as an institutional foundation for execution, which is both a national and local priority UNIDSR (2012). It has urged the region's institutions, processes, and capability to enhance disaster prevention. The concept of change argues that including children in decision-making via active family and community engagement will help children reach their full potential and rapidly escape any crises (IRP, 2006).

The Philippine government did not expressly require children to participate in a disaster risk reduction program. The country's lack of capabilities and technical expertise and a lack of comprehension of Republic Act 10121 and its obligations resulted in a low degree of child safety (COA, 2015). Therefore, the department of education...
directive ordered a disaster risk reduction office for creating and managing methods for enhancing resilience and institutionalizing a culture of safety and protection for children (DepEd order no. 50, 2011). They have thus produced a guidebook for reducing the catastrophe risk of safer schools with a disaster risk reduction in their curricula (DepEd DRRRM, 2008). However, staff and instructors regretted their lack of expertise in catastrophe programs. However, the additional required duty exacerbates the multitask problem by teachers' absence from disaster programs.

The disaster management program of the Provincial Disaster Risk Reduction Council in Davao del Norte also assessed several challenges, capability gaps, and difficulties in processes mechanism for children disaster program (PDRRMC Plan, 2017). However, every time heavy rain downpours in the province, the Asuncion municipality of Davao del Norte is struck by severe flash floods. Some roads were closed, and electricity lines in Asuncion's Barangay Sagayen were cut (Sambalud PDI, 2019). Most communities, including Barangays Sta. Filomena, Doha Andrea, Canatan, Buclad, and Sagayen, were submerged in floodwaters, trapping children in schools and families (NDRRMC, 2011). Thus, in the province of Davao del Norte, the children's resilience program was not implemented. There has been no attempt to investigate the disaster resiliency framework for children in continuing education in the local government unit's most flood-prone areas.

This study aims to examine disaster resilience concepts for children in the province of Davao del Norte. They are vulnerable to high water, and identify the underlying components of the children's resilience disaster, and develop a disaster resilience framework for children in education. The multi-sectoral such as the student organization representatives Sangguniang Kabataan, government leaders of young people in small towns, disaster risk reduction, and the education department's disaster management coordinator, the youth development committee of the local community, and the social welfare department form part of the conducted study to conceptualize disaster resiliency for children in education.

II. METHODS

Data collection

The municipality of Asuncion in the province of Davao del Norte has the highest flood-prone municipality, with at least 80% of high flooded schools and a total population of an estimated 35,500, with 25 schools, both primary and secondary, widely located and geographically scattered in small villages. At least fourteen (14) extremely high-flooded school areas were found. The others are in a normal state. An estimated 13,200 people are among the most vulnerable, including boys and girls aged 0 to 10 and people aged 61 and above. The Department of Education's Asuncion National High School, Buclad Elementary School, Cabaywa Elementary, Napunga, Silangan, and Sonlon schools are the most vulnerable to flood hazards (GeoAnalitics, 2021).

Participants

Purposive sampling use to select knowledgeable participants (Lavrakas, 2008). The requirements for the participants were the top three most outstanding flood susceptibility hazard schools based on the government's databank, namely Asuncion National High School, Buclad Elementary School, and Cabaywa Elementary Primary School. The schools above are widely distant from each other throughout hilly rural and urban areas, with just a single motorbike and a four-wheel public utility vehicle accessible for transportation. As a result, the researcher decided to select key informants from two (2) representatives of the student government organization in each of the schools and one (1) officer representative of the Sangguniang Kabataan organization under the local government unit leaders in each of the three villages. Furthermore, key informants included the head of the municipal disaster risk reduction office, one representative from the local youth development council office, one from the Department of Social Welfare and Development, and one from each of the three schools mentioned by the Department of Education in charge of the Disaster Risk Reduction Management Coordinator, as well as one representative from the provincial youth federation. An overall total of twenty-seven (27) participants was selected for the study.

The majority of the children, both boys, and girls, among the study's 27 participants, were highly attentive during the focus group discussion. Because the senior official from the division office approved the same with the parents of children and pupils, the researcher could conduct the study within the school. The researchers conducted a formal conversation with the senior administration of the schools and the parents about the study's abstract. Without the presence of their teachers, the researcher conducted three separate actual focus group sessions with students and student government officials from each of the schools listed. Because they absorb and feel the dangerous scenario, these children participants are astute in responding to the open-ended guiding
questions supplied by the researcher. The researcher had difficulties locating the remaining participants, such as the Sangguniang Kabataan, due to their very irregular work schedules as government-paid leaders. The researcher met with each of them outside of their town and obtained thorough replies from them. At the same time, the local disaster head representative and the official from the Department of Social Welfare and Development performed quick contacts and interviews.

**Questionnaire items**

The open-ended guided questions employing the John Owen technique are divided into two sections. The first is proactive programming, which identified problems and requirements related to the catastrophe flood threat faced by the participants. The last one was the framework indications and components for developing a program for children after a disaster in continuing education. At the same time, the researchers receive relatively little information on the participants' fundamental socio-demographic profile that is requiring for the study, such as age, year of schooling, work position, and department name of employment. All sections of the questionnaire were translated into layman's words and language appropriately.

The first section of the guide questions focused on identifying the participants' problems and needs in flooded hazardous areas. Many follow-ups and sub-questions are starting from leveling off the definition of disaster, going to recounting and narrating their personal experiences with children in disasters, describing the risk exposure of children in floods, addressing children's disasters problem, discovering flood-related solutions for children, implementing mitigation and preventive projects for children, readiness projects, emergency response, and restoration projects in the region.

The second part, the framework designed for children's disasters in continuing education, was investigated and interviewed—the same approach as in the first part. Many sub-questions articulated related to the following: the background of the disaster resiliency framework, disaster resiliency framework or concepts, components of the disaster resiliency framework, how to achieve disaster resiliency for children in a disaster, participants' suggestions on intended outcomes of the crafting of the disaster resiliency framework and program, and the needed disaster program elements.

**Research analysis**

The study's research analysis was organized following the goals. The first is to explore disaster resilience ideas from the perspectives of multi-stakeholders concerned with schooling for children in the province of Davao del Norte who are vulnerable to high water. The study will utilize Strauss's (1967) grounded theory matrix, stressing scientific data processing from transcriptions. The audio-recorded interview was converted into writing without removing words from the original interview and then translated into English terms. In the illustration, the following column, such as data coding, assessed the essential keywords from the transcripts. Above the first arrow, the next stage is the additional layer with grouping and classification of the important keywords, and the classified codes are then saturated. The last layer in the illustration going up is the study of theoretical concepts, which comes last. The following study technique focuses on identifying the underlying components of the children's resilience disaster, using secondary data from reviews of related literature based on the previously assessed indicators and followed by discussions in paragraph form. Finally, the disaster resiliency framework for children in school is has been developed. The basis of the framework exists as a product of the critical components resulting from the second objective analysis. Then the drawing of relationships and directions towards each other explaining the stated new framework for disaster resiliency of children in education.

**Ethics**

The study collaborated with the Provincial Disaster Risk Reduction and Management Council of Davao del Norte Province, the Municipal Disaster Risk Reduction and Management Council of Asuncion, the Department of Education division level in Asuncion Sangguniang Kabataan Provincial federation, and the Student Government Organization. As a result, it goes through all of the politeness and conversation from the highest officials of the local government unit, including the parents of the boys and girls who participated in the informed consent interview guiding questions. In addition, the university passes through with ethical assessment by a team of experts.
III. RESULTS

The study's findings and discussions are present in the following order: first, stakeholder perspectives on children's disaster resilience; second, the basic elements of children's disaster resilience; The third and final proposal is a framework for disaster resilience for children. The theory base on the stories of research participants. The complete transcripts, including codes, code classification, code saturation, and idea statements.

Views of the Stakeholders on Disaster Resiliency for Children

Lack of understanding of the disaster. The thematic analysis of the participants' recommendations for coping with children's concerns during catastrophes is depicting in Figure 2. It suggests that most children are unprepared for disaster, unforeseen occurrences such as earthquakes and typhoons, which can be lethal. They only understand man-made disasters, such as floods caused by tree cutting, which destroys the forest, and agriculture, threatening the community's livelihood.

![Figure 2. The idea and experiences of the participants in addressing the problem of children in times of disaster.](image)

Flooding, fire, typhoon, and earthquake are all instances of catastrophes that may end in death," according to student council officials. "There has been evidence of tree cutting, which looks to be the source of floods, which has affected agriculture, but we can still prepare.

According to officials from the Sangguniang Kabataan, it is a sudden event that causes tremendous damage and loss of life. Furthermore, as stated by the DepEd Disaster Coordinator, suddenly, it may flash if there is much flooding. Damage caused by flooding. Finally, the local disaster administrator emphasized that the data indicates our municipality's extremely high flood sensitivity. It is true that we largely endured floods.

The participants recounted their catastrophe experiences. According to the student council officers, we suffered a magnitude five earthquake with severe rain. The most disastrous flood was a strong flood at the school's gymnasium. We fled but were concerned that something terrible would happen, such as injuries. We suffered flooding immediately but were disregarded by the government and the community.

Another an official from the Sangguniang Kabataan stated, "We encountered a very high flood that inundated people, floods that might bring a home down to the point that you could not breathe anymore, floodwaters to human leg level height." The worst experience, according to the Department of Education disaster coordinator, is floods that can flash people owing to extremely high water caused by heavy rain. Finally, according to local disaster experts, we suffered extremely significant floods. Many families impacted had numerous issues with their constituents, such as economic losses.

Thus, the above-analyzed data as experienced by natural disaster participants in the flooded municipality of Asuncion resulted in insufficient knowledge about disaster risk reduction and management principles, which was interpreted as a lack of understanding of disaster preparedness concepts, putting them at high risk.
Lack of preparedness and response. Figure 3 depicts how victims rushed into the school gymnasium and then to the national highway, which was designated as an evacuation hub in the event of floods while children are swimming and having fun; this puts them in danger. The triangulated perspectives of multi-sectoral actors, such as children, young people, teachers, and government personnel, were highlighted.

Nevertheless, according to the tales of the student leaders, "The flood is quite high, reaching above a person's head. We evacuate when the conditions are favorable or when the water level is low. Natural disasters are extremely harmful. We might be hurt or perhaps killed. We should be cautious when going about because there are numerous bushes and big objects that might fall and cause damage."

Following that, Sangguniang Kabataan authorities announced that "Initially, children and adolescents should house in a safe area. Sangguniang Kabataan officials should be alerted ahead of time to minimize rising water that might cause flooding. Sangguniang Kabataan officials must be informed and diligent."

Furthermore, the DepEd DRRM focal person stated that "children should be maintained in a safe area and not be let in flood just to stroll and play since they may get harmed." Programs and lectures are straightforward and customary in school. Teachers, on the other hand, find implementation difficult. Furthermore, not all professors are well-versed in their subject matter. Only one day of compressed instruction was provided the previous year, and drill executions were not adequately controlled. The children are highly cooperative, but the parents, guardians, and barangay officials are not collaborating and performing poorly. They appear to be taking things seriously. The turnout was the most disappointing aspect. There are 31 pupils in a class of 31 children.

According to another member of the local disaster officials, "Our only restriction is that we are only responsible for supervising the implementation of disaster risk reduction and management. The CSSDO is responsible for children's concerns. While it is true that children are constantly vulnerable,"

Concerning the dangerous exposure of children during disasters, the DepEd Disaster Focus stated that "the streets and national highway were used as emergency evacuation sites since the school was also hit by very high waters, particularly in the gymnasium." We have at least two very high flash floods every year. People and parents are well aware of the deluge of suggestions about what to do and where to go. As a result, they rush the youngsters to a safe location on the national highway. When there is a flood, the children will constantly play in the flooded water and the unclean creek, which is dangerous since they may be damaged or injured. Every time it rains or floods, the children suffer.

Furthermore, "the very high water was the worst and most perilous condition we experienced," according to the student leaders. According to local youth and development leaders, "the most dangerous things here were floods, fires, and earthquakes." Finally, "the greatest high-risk disaster was a flood or a very high degree of flooding," according to local disaster managers.
In general, dangerous exposure refers to highly high flooding that inundates school buildings, potentially injuring children who swim. A national highway as an evacuation route seemed to lack understanding of children's lifesaving abilities. The children were out of control in the flooded area. They are having low participation in disaster risk knowledge and skills, education about flooding and drills, and difficulties implementing activities that disappoint the assigned person are thematically analyzed as a lack of disaster risk reduction and management and conceptualized as a lack of preparedness and response.

Lack of capacity in disaster management. Figure 4 idea, as witnessed and disclosed by participants, indicates relatively conservative participation of children and youth in disaster risk mitigation and climate change initiatives. There was minimal knowledge, such as earthquake exercises for children at school. At the same time, they had no transparent, particular engagement during the relief efforts in the evacuation center but as a supported distributor.

"When a crisis strikes," the student leaders say, "there should be rapid public information distribution." They should not be concerned. Nonetheless, people should plan ahead of time by storing up on water and food supplies. Making safety precautions for valuable items such as books should be prioritized to minimize damage and casualties.

According to another DepEd Disaster Focus statement: "Parents should be able to get information about it. The school's status should be improved. Place no garbage everywhere so that it does not choke the creek if it rains: This might result in floods. The bookcases should rise. It is not safe to let children play in the flooded region. They must be training on what to do before, during, and after a disaster. Children are occasionally left to join the orientation on appropriate rubbish disposal, although they commonly pick up garbage."

The Sangguniang Kabataan's subsequent response was, "Parents should be informed of the disaster because the youth will heed the counsel of the elders. Because they are skilled in the procedures, the elderly will be the ones to guide. Our community's flood was always an issue, and it was never adequately resolved. The youth leaders emphasized it."
However, there are alternative answers to the problem of children in crises. Students who serve as leaders "had a tutorial on what to do, what to prepare for, and how to be prepared to distribute catastrophe information; the municipal will contact seminar offices, people concerned, the Barangay Chairman, and other leaders. After that stay on red alert, the rescuers will stay on red alert since the indicator indicates when the water level in the dam reaches its maximum level. That is when they will sound the siren as an early warning."

As a result, officials from the Sangguniang Kabataan stated that "constantly involving children and youth during earthquake drills and fire drills in the sudden event causes great damage." During the disaster, there were a lot of affected people who did not have food. The municipal is very fast at delivering food to the affected people. There is this rubber boat that immediately arrives that will distribute food.

The DepEd disaster focal, on the other hand, claimed that "When the disaster strikes, we have a scarcity of rescuers, a deficit of supplies (typically, rubber boats seemed during flooding), and a shortage of personnel. The disaster will come at some point. The schools will issue a memorandum of suspension of courses immediately. Furthermore, according to local disaster experts, "We did database profile monitoring for people affected by the floods here with us. The CSSDO has typically held children's congresses, first aid training, leadership youth camp, spiritual improvement, accessible writing, painting, dance, youth and family interactions, and eight phases of human development in children. After the catastrophe, they also held friendly places for temporary refuge.

In general, the lack of reaction and recovery was thematic to address in the solution. Due to a lack of respondents and limited equipment types, relief operations, database profiling, monitoring is being carried, early warning and response, information dissemination, and psychosocial intervention training on disaster risk and climate change.

The essential terms such as saving a life, readiness, frequent drills, teaching and guiding parents/guardians, and enhanced understanding all contribute to the themes of community catastrophe preparedness. The children were abandoned and given little significant attention to the disaster risk program. While, they observed that there was no proper waste disposal, early warning communication, infrastructure safety, and rescue operations in a safe area. They saw it as a lack of disaster management capabilities.

**Insufficient knowledge on mitigation.** Figure 5 shows the informants' lack of knowledge, skills, and attitude toward disaster risks, such as hazard mapping, early warning communication, and proper garbage disposal. They admitted that they had no idea how to use the early warning devices installed inside the school. There was no training available. Even though R.A. 10121 requires the Department of Education to incorporate disaster risk reduction and climate change into academic subjects such as hazard identification, informants revealed that they lack training and expertise in these areas.
Figure 5. The mitigation and prevention projects

"Eliminating the abrupt occurrence creates considerable and long-term risk," according to Sangguniang Kabataan authorities. The canals are ongoing renovation. Furthermore, DepEd disaster focal participants stated, "The mitigation involves preventive actions, but there are no widely publicized statements here." If there is a significant flood, the students will be urged not to attend school. We practiced earthquake exercises, as well as duck, cover, and hold. When we see that rain is forecast for the entire day, the instructors will quickly request rentals for my flats located on higher ground. The teachers quickly safeguarded the books and other vital materials in a secure location away from water. The animals will be kept in a safer location away from floods."

According to another local youth development worker, "Canals have just undergone extensive repairs, including deep digging. I noticed that there was extra building for water irrigation, although I was not involved in that operation."

The pivot, the participants' idea on mitigation projects done in the region, was the lack of information on mitigation and preventative activities due to insufficient preemptive measures, children's lack of opportunity, lack of awareness on hazard, and catastrophe risk climate change. The canal is in renovation, but it is now too late.

**Reactive disaster preparedness.** Figure 6 reveals a lack of participation from the parents or guardians of pupils in elementary and high school. The participants said that when parents show poor support for school activities, they also do the same thing. While teachers' multitasking functions in increasing knowledge and skills in emergency response made them disappointed and, worst, children neglected. However, they admitted that disasters could be learning through preparedness projects. Furthermore, according to the transcripts of the Sangguniang Kabataan officials, "usually, if we talk about preparedness and awareness, of course, the priority is, if a disaster comes, then flooding will immediately occur. Ahead of time, there was information, but I observed a schedule of at least 20 barangays joining. However, because they could not accommodate all barangays, they conducted a seminar for awareness and preparedness for flooding."

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In addition, the local youth development council officer also said, "During the disaster, there was fast delivery of food and relief operations. In school, children ask to help prepare food packs for disaster victims when the municipal disaster office calls for help." Lastly, the DepEd disaster focal shares that "to avoid any damage to books, we immediately transfer and put in the higher level of safety laid on top of one another over and over again." emphasized by the teacher representative.

The preparedness and response projects implemented were reactive disaster preparedness due to the lack of information, precisely limited awareness, and preparedness. Next was the property damage observed during the calamity and flooded books during such a disaster. Lastly, the reactive but delivered relief operations.

**Lack of capacity for emergency response.** Figure 7 reveals that although the participants had training in emergency response such as essential life support and search and rescue, scarce responders from the selected few barangays initiated training at the provincial level only. No localized training has happened yet in the ground under the department of education, coming from the initiative of the barangay level and per school, mainly focusing on children and youth, but very limited to earthquake drills, especially in schools. There was limited equipment, so monitoring and database profiling is also limited in critical areas.

Notably, according to the participants' transcripts, "there was an earthquake exercise that we were able to do in school, such as duck, cover, and hold. These are the usual activities in the school that they conduct. We were the only participants. When our teachers called us, we immediately got inside the classroom to perform drill activities. After we listened to what the next instruction was from the teacher." Told by the student leaders.

According to the Sangguniang Kabataan officials, "the municipal will get youth representatives to be the responders and rescuers in the area. Because I saw in the Magao river where my friends were, I asked them if it was part-time or a time limit. In the meantime, they can earn money. I observed just a small number, I think six responders and rescuers, and they had a leader that was all in youth groups. They were all trained in the city of Asuncion because they live there in the area."

Figure 6. The preparedness and response projects implementation.
Figure 7. The emergency response projects

Besides, the DepEd disaster focal declares that "in Asuncion, when we conducted a seminar last month in August, I guess or September, in municipal my co-participants, many different individuals were coming from the different concerned offices. There was a doctor, for example, working in the municipal disaster. It was rainy at that time, and they also prepared for the national disaster. I heard them and the others from the national disaster always asking if the rubber boat was already prepared and the rations like food packs. They should have packed food relief, but the DepEd was not yet prepared. I could not realize what my responsibility would be as a newly designated district coordinator in a disaster. I have all the barangays in Asuncion that I will monitor and roam around in times of flood. Then I realized I could not monitor them all. I will monitor only my school. I will watch the water level closely. I made use of video to monitor the high flood water activity. In another share, the local youth development officer said, "If the flood slows down, we will immediately clean the surroundings. If there were a retrieve, we would take a picture immediately. Furthermore, it will report after the disaster. We also saw a rubber boat in a barangay that will go to the critical area."

Furthermore, the DepEd focal said that "in the school experienced flooding, teachers were already aware that the books should always be putting in a safe area. Some teachers will just put the books on the table after the table collapses. The books will also turn wet and scattered after I report on how many books were damaged. Then, ma'am, Tin will get the report. The last disaster, specifically typhoon Pablo, has many reported damaged books. I guess we are not prepared. We did not expect that the flood would be that high. Then, ma'am, Tin requested a report on how many books were damaged, but unfortunately, there was no reply. The books that the students were using were those books that Typhoon Pablo damaged that we reported. It should be changed if possible next year and replaced with a new one. We have many enrollees, but unfortunately, there was no reply or action to replace the damaged books. However, there was a damaged building here in the building problem, but so far, there have been no damaged or affected buildings in the school where I work since the last disaster. However, I know from the news that the school was affected by the disaster. Luckily, there was a response immediately in the building damaged by the disaster. "The entire concept of the emergency response project implementation is the following. First was the lack of capacity for emergency response thematically analyzed with the scarcity of responders, reporting damage books, used rubber boats, distributed relief, training of few responders, cleaning the surroundings, and the disaster risk and climate change.

Lack of capacity for disaster recovery. Figure 8 revealed that after the devastation, such as the very high flooding, they observed food relief deliveries such as ready-to-eat food distributed to the affected population on the national highway used as an evacuation center. Moreover, the other institutions facilitated psychosocial intervention for a fast recovery of children traumatized through creative play, leadership training, family development support, and the likes. However, they could not sustain as expected because they lack facilitators, lack resources, and time.
Narrowing the analysis, according to the Sangguniang Kabataan officials, "Currently they are focusing on the barangay officials' training on the disaster. When there is a municipal ratio, I will immediately call the S.K. officials to help with relief distribution. The first thing needed is self-discipline and awareness of flooding. Other people are very chill and have no idea, so there are many casualties. For example, during the typhoon Pablo, there was heavy rain. However, many people ignored it because they lacked awareness and preparedness for the disaster. They must be aware that there is no typhoon, but they should not chill and relax. At the same time, there is continuous rain and flooding, so immediately make the preparations and other preemptive measures. It is very dangerous in our barangay because of the very high current of flash floods. Last time there were five houses taken away due to very high flash floods.

Another answer from the Department of Education disaster focal stated that "The teachers will immediately come to our school even if the flash flood is still there to do some help. However, like those living in Tagum city, the other teacher arrived later after the high flood subsided and was safe. The children living far away from our school cannot go to school any longer to help. However, those children who were nearly living at school can help with recovery instead, but we do not know about the rehabilitation projects."

Similarly, the local youth development officers also stated that "The priority called for should be children to evacuate and next should be women to ensure. The local youth development office has not yet started focusing on that kind of program for disaster rehabilitation. We have difficulties coming up with a plan for victims of disasters, but if there is a chance, the office will do a development program for the youth, such as on health and education. There are nine development centers to tap for the recovery plan to cater to those children who experienced trauma. There will be a program for children that will be playing first because children cannot understand immediately.

Moreover, we should not focus on children but prioritize the guardians or parents to educate the young ones and children instead. If we directly educate the youth and children, they will not listen to us seriously. It will only pass through the air.

Another reply from the municipal disaster official stated that "If I could remember, after the devastation, they had programs for youth and families such as spiritual enhancement, discussing the eight stages of human

Figure 8. The rehabilitation and recovery projects

Lack of capacity on disaster recovery

- Lack of experts
- Limited relief delivery
- Facilitate trauma therapy
- No training on disaster risk reduction
- Planning health and education program

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development, first aid training, and leadership youth camp. They have a children's congress attended by the preschool pupils, with activities such as essay writing, drawing, and dancing. All these activities are a pattern from the province."

Generally, participants' concepts of the rehabilitation projects implemented in the area were the lack of capacity for disaster recovery. The thematic causes were the lack of experts, lack of capacity, limited relief delivery, and no training on disaster risk reduction. However, there was planning for health and education programs.

The informants' overall views on disaster resiliency for children are a lack of understanding of the disaster, inadequate knowledge of mitigation and prevention, reactive disaster preparedness, a lack of capacity for emergency response, a lack of preparedness and response, a lack of capacity for disaster management, and a lack of capacity for disaster recovery.

The Underlying components of Disaster Resiliency for Children and Youth

The study's revealed components from the informants' overall results are in the following order. The indicators are hazard analysis, capacity building, saving lives, and performing arts link to inclusive participation, coordination and mechanism, and safe infrastructure and location.

Hazard Analysis. The analysis of hazard vulnerability and risk such as flooding, earthquake, and fire that the area has been experiencing should be considered an essential component of developing the disaster resiliency framework for children. We cannot merely make activities related to disaster risk reduction that make children and other vulnerable sectors knowledgeable and skillful without the necessary and deep understanding of the affected community's hazard.

A disaster is defined as a "severe disruption of a community's or society's functioning including extensive human, material, economic, or environmental losses, and consequences." When a school is exposed to recognized dangers and is likely to be impacted by the effect of those hazards if and when they occur, it is said to be 'at-risk' or 'vulnerable' (UNDP, 2021)

The OIEWG report, released in 2016 and accepted by the UN General Assembly in 2017, defines a hazard as a process, occurrence, or human action that may cause loss of life, injury or other health consequences, property damage, social and economic disruption, or environmental degradation (UNDRR, 2020)

Risk is commonly defined in natural hazard and disaster risk reduction research due to the interaction of a hazard, such as a flood, hurricane, earthquake, and the system's vulnerability or element exposed. The chance of a flood occurrence is combined with the possible scale of repercussions that might develop if the event struck civilization or exposed elements (UNDRO, 1980; Cardona, 1990; UN/ISDR, 2004, 2009; Birkmann, 2006b).

The study on risk assessment and risk management concluded that several projects in integrative research had been launched in recent years to create broader perspectives on risk conceptualization, assessment, and management. According to the current author, this method of thinking is critical for expanding the risk field and establishing a solid unified scientific foundation. These points of view are associated with concepts and phrases like risk, susceptibility, and probability (Aven, 2016).

Conferring to the United Nations, disaster risk management is the systematic process of implementing strategies, policies, and enhanced coping capacity to limit the detrimental consequences of hazards. When disaster-risk management methods are successful, the objective, according to the United Nations Development Program, is to reduce the consequences of hazards (UNSPIDER, 2021)

According to the SENDAI framework for disaster risk reduction 2015-2030, children prioritize action. This framework aims to make sure that people understand disasters, hazards, risks, and vulnerability. It will help everyone spot dangers, prepare for hazards, prevent them from becoming disasters, and keep themselves, others, and their belongings safe (UNIDSR, 2015).

In addition, the national disaster risk reduction and management council planning office 2011-2028 emphasized the principles as stated. That safer, adaptive, and disaster-resilient Filipino communities towards sustainable development must hold the vital indicator of avoiding hazards and mitigating their potential impacts by reducing vulnerabilities and enhancing the exposure capacities of communities.
According to a United Nations study on children's action for disaster risk reduction in Asia, schools must be safe, and education must not be interrupted. Child protection must be a priority before, during, and after a disaster. Children have the right to participate and to access the information they need. The community infrastructure must be safe. The relief and reconstruction must help reduce future risk and ensure that disaster risk reduction must reach the most vulnerable. Therefore, it is necessary to raise knowledge of mitigation and prevention through hazard vulnerability capacity and analysis with children and young people (UNIDSR, 2012).

Hazard exposure, such as very high floods with landslides, will cause the loss of lives, livelihoods, properties, and disruption of a particular community's regular economic activity. Thus, the Mines Geosciences and Bureau recommended the municipality of Asuncion to maximize the data gathered as their baseline data for an action plan on disaster mitigation and risk reduction anchored to the area's climate land use planning (MGB, 2017).

The flooded school areas lacked knowledge and skills on hazard vulnerability capacity, disaster risk reduction, and climate change analysis. At the same time, children have no apparent involvement in disaster mitigation measures or alleviation or reduction projects to eliminate the problem, which puts the entire community at a high-risk disaster, according to the mines geosciences bureau. However, the other attempts to find a solution for children and young people in the disaster had limited information on early warning communication (MGB, 2017).

**Capacity Building.** The reactive thinking on disaster preparedness affects the most vulnerable sectors, such as children and young people, and others in the affected community at high disaster risk. Thus, strengthening the unity of the mentioned groups through related training would make them prepared ahead of time and much more resilient than impulsive.

According to the school safety framework on school disaster management, by 2030, all nations will have established and resourced/implemented national DRR, CCA, and resilience strategies for each sector. In addition, by 2030, all schools will have implemented an integrated DRR process in collaboration with local government and communities, with a focus on crisis management and resilience development (Zook et al., 2021).

Children should be engaged in planning and decision-making in all communities in disaster risk reduction with enthusiasm and their terms to ensure preparedness in the area. They may need support to secure their parents, teachers, and other community members (Mitchell et al., 2009; Back et al., 2009).

According to the SENDAI framework for disaster risk reduction for children, the priority is to strengthen disaster risk governance to manage vulnerabilities. It aims to ensure that local leaders, government, chiefs, and international agencies are established before, during, and after disasters. They should all have clear plans and established ways to prevent disasters from happening and respond when a disaster strikes.

However, the reactive thinking on disaster preparedness manifested amid very high flooding experienced by the informants in the flooded areas of Asuncion, Davao del Norte Province. For instance, the planning of the evacuation center used the national highway, which is very risky, especially for children. In contrast, the disaster risk reduction and management focal coordinator in the education department did not know how to use the early warning device communication according to hazards.

In general, pro-active thinking on disaster preparedness and response principles must be enforced seriously for a resilient community. It means planning ahead of time, putting in place a comprehensive coordination mechanism and communication system, and increasing the level of knowledge of the mentioned disaster preparedness.

**Saving Life.** On emergency response for children and youth in the flooded area, saving life skills such as first aid, search and rescue operations are essential for a disaster resiliency framework for children and youth.

Disaster risk reduction education and life skills framework for school safety effect by 2030, all students are armed with DRR- and CCA-related life skills, equipping them for a safer and prosperous future, disaggregated by gender and age. Furthermore, by 2030, all schools should be using knowledge, innovation, and education to foster a culture of safety and resilience through curricular and co-curricular activities (Zook et al., 2021).

The law about the Republic Act 10121 of 2010 stated the principles of disaster response. Moreover, saying the provision and preservation of life and meeting the basic subsistence needs of the affected population based on acceptable standards immediately after a disaster towards safer, adaptive, disaster-resilient Filipino communities
towards sustainable development is necessary. Consequently, this is inconsonant with the SENDAI framework on children's disaster resiliency objective that has a special mention of investing in disaster risk reduction for resilience. It aims to make sure that both public and private actors spend enough money on disaster risk reduction. It recognizes that this is an excellent way to spend money in the long term because it contributes to sustainable development, such as training many first responders, including children and youth, with many emergency response equipment types.

Accordingly, only a few responders trained, using rubber boats, monitoring with database profiling, and reporting damage, but mainly focusing on the critical areas, delivering relief operations with a lack of responders, and limited equipment types, while others were throwing garbage improperly.

Another, the situational overview report about the local disaster risk reduction and management of the municipality of Asuncion dated January 30, 2019. Mentioned that due to continuous heavy rains brought by the tail end of the cold front causing flashflood leveling at 29.1 meters above sea level, all barangays of the municipality of Asuncion were flooded starting January 26, 2019, until January 30, 2019. Thus, damaged and partially damaged houses and many of the population were affected and evacuated to the national highway. So the actions taken were the continued monitoring and rescue of the vulnerable populations and the distribution of relief goods. At the same time, the provincial responders made rescue service response efforts. They faced a complicated issue of rescuing due to a lack of responders (MDRMC, 2019).

However, strengthening knowledge and skills in emergency response and operations is necessary, such as water search and rescue in flash flooding, essentials of firefighting and control, earthquake drills. Damage needs assessment of the vulnerable sector to ensure a safer community.

Performing arts. To build back better is to use creativity and innovations to help recover the children and young people affected by the devastation in the area so that they will be able to express and release the hidden emotions and feelings kept during the disaster.

Elsevier literature on art and music approach for the treatment indicated that art and music therapy provides them with the benefits of a universal, nonverbal language, with immediate and significant emotional impacts. Methods of music and art therapy enable the development and harmonization of all personal skills in children with special needs, assisting in their social integration (Coroiu et al., 2015).

According to study findings, arts help individuals survive in difficult circumstances – even during a pandemic that prohibits us from experiencing art and culture in the exact physical locations as others (Hirsu et al., 2020). Published in the international journal of disaster risk reduction on cultural interventions via children's literature and arts-based activities in times of catastrophe a case study of reading mediators' reaction to the Mexican Earthquakes.

The disaster rehabilitation and recovery philosophy that restored and improved facilities, livelihood and living conditions, and organizational capacities of the affected communities emphasize the mentioned locally implemented law. Furthermore, reduces disaster risks following the building back better principle should be linked to a safer, adaptive, and disaster-resilient Filipino communities towards sustainable development by the Republic act 10121, known as the Disaster Risk Reduction and Management act of 2010.

Additionally, SENDAI's international framework on rehabilitation with children's resiliency aims to enhance disaster preparedness for effective response and build better recovery, rehabilitation, and reconstruction. It also aims to ensure that everyone is ready when hazards strike, to be more effective and organized. When families, communities, and countries fix everything that broke in a disaster, the Sendai framework aims to help them build back better next time.

However, manifested in the devastation aftermath, the social workers facilitated a psychosocial intervention for traumatic children, such as art shops and other creative activities with children and youth in the evacuation center, but with limited resources and time facilitators.

Generally, psychosocial intervention is a significant and crucial part of post-disaster activities, especially for children. Suppose children are capacitated and developed to facilitate and get involved in the mentioned creative interventions, such as performing arts. In that case, they can help build back the community.
**Inclusive Participation.** The component of inclusive participation towards developing a disaster resiliency framework for children is one of the most significant indicators. Only through children and other vulnerable sectors in the activities related to disaster risk could an environment quickly fight back and build better.

The active participation of children and young people comes in the promotion of participatory techniques. Promote the incorporation of children and youth into all local activities for community disaster preparedness. Accordingly, building resilience is not only the public sector's job alone; it must involve multiple stakeholders, from the private sector and civil society to regional and international organizations (UNICEF, 2010). King et al., 2013 and Tanner (2010) urge a firm grounding for child participation in disaster risk reduction to begin with participatory, child-centered research methods and approaches that acknowledge children's efforts, capacities, and understandings, including and respecting the voices of all children.

However, the interviewed participants revealed that children's involvement is limited to earthquake drills. In contrast, the same children are caught in hazardous flooded areas swimming and wounded. Another observation was that the parents-teachers association, having been evaluated with low participation, did not have the opportunity to get involved in disaster resiliency programs. The barangay officials were having a complicated problem with mobilizing children due to the non-articulation of the barangay development plan's inclusion of the former for disaster resiliency.

Therefore, inclusive participation in disaster resiliency with children and young people creates a more resilient environment across age, gender, and culture. Thus, children must include in disaster resiliency activities such as but not limited to hazard identification, preparedness planning, and response operations, and recovery as well.

**Coordination and Mechanism.** Another component for developing a disaster resiliency framework for children and youth is coordination and mechanisms among the disaster players, such as the Department of Education, Provincial Disaster Risk Reduction and Management Council, Municipal Disaster Risk Reduction and Management Council, and Barangay Disaster Risk Reduction and Management Committee. The highly inter-agency and high-multitasking institutions should strengthen and evaluate their coordination lines and innovative mechanisms.

According to the Federal Emergency Management Agency Strategic Plan, 2014-2018. Strengthening organizations should have clear outcomes that are an effective and engaged workforce with recognition for its task and excellence with integrated analytics capabilities, greater consistency, and transparency in decision-making.

Additionally, the National Disaster Risk Reduction and Management Council Planning office designed a template for planning, including the department of education at the ground level, detailing its goal, outcome, output indicator, sample activities, task, and monitoring evaluation as mandated by RA 10121. Nevertheless, their many challenges experienced, such as the lack of expertise, limited resources and workforce, high multitasking of employees, and high multi-enter agency approach, ensuring disaster resiliency.

Nonetheless, according to the informants, the Department of Education's objective and effort to integrate disaster risk reduction and management into the academic discipline faces many difficulties due to the lack of personnel, lack of expertise, lack of time and resources. For instance, sometimes, in their disaster emergency response training, many other related topics have been compressed into one whole-day seminar only. Consequently, this resulted in inadequate knowledge and performance in disaster risk reduction and management. Worse, the personnel depreciated job productivity due to multitasking – the additional job as mandated by the top management of the mentioned institution. The informants emphasized that they had no other choice but to comply with the particular order to comply with the mandated law. Thus, children with inadequate knowledge and skills for disaster resiliency are in danger.

So, the department of education on multitasking and complacent performance for disaster resiliency should be review. The department should strengthen the strategy by looking into partnerships with parents and teachers' associations, the private sector, and children and youth organizations to participate and mobilize for disaster resiliency.
Safe Infrastructure and Location. The school building and other infrastructure located in the very high flood susceptibility area of the municipality of Asuncion were important components that need to address in this study towards developing a disaster resiliency framework for children and youth.

According to the indicators of school safety framework on safe school facilities, the goal is to reduce the number of children killed in schools by 2030, having no children died by a disaster in a new school built after 2015, split by gender and age. Moreover, by 2030, the goal is for every kid to be taught in a secure and accessible learning environment, regardless of gender or age (Zook et al., 2021).

However, school construction's suggested capacity should give the sub-contractors who show repeated incapability signs and, hence, must be expelled and blocklisted from the bidding process. There should be training before the assignment, such as integrating disaster risk reduction into construction. Capacity building, especially regarding disaster risk reduction concerns, should be provided to engineers (ADPC, 2008).

Another, disaster risk reduction as a national and local priority with a strong institutional basis for implementation is a priority for developing and strengthening institutions, mechanisms, and capacities to build resilience to hazards. It is the strategy for the substantial reduction of disaster losses in lives and the social, economic, and environmental assets of communities and countries. It is a framework for building nations' resilience. The Hyogo Framework emphasized it for actions from 2005-2015.

Meanwhile, the Republic Act of 2010, known as the Disaster Risk Reduction and Management Act of 2010, articulates its mandates to look into a safer community against any disaster through mitigation and prevention comprehensive planning of infrastructure, especially school building the proactive mode disaster. Consequently, in the rehabilitation, buildings’ principles reconstruction should undergo disaster proof-infrastructure standards. The construction firm must attend training on disaster proof-infrastructure and standards to make a safer and sustainable community.

Nevertheless, the exceptionally high flood susceptibility area in Asuncion, one of the municipalities in Davao del Norte province, was confirmed. Most of the infrastructure built is positively affected because of the mentioned hazard the vulnerable sector such as children exposed to disaster. According to Mines Geosciences and Bureau 2017 assessment report. Despite the international and national mandates, the institution at the ground level faces many challenges.

The informants experienced and observed the very high flooding that invaded school infrastructures such as the school gymnasium, which flooded, damaged agriculture and livelihood, and, worse, neglected children. At the same time, the national highway uses as an immediate evacuation center.

According to the technical report on the exposure maps of the population, built-up areas, and road networks in the municipality of Asuncion, the province of Davao del Norte revealed the very high flood susceptibility of the mentioned province. Exposed to very high flood susceptibility is the barangay of Dona Andrea, reaching 93.07%. Next is the barangay of Magatos, with 66.85% of the population exposed to the mentioned hazard. The mentioned Barangay was the chosen area for the sources of data gathered and selected vulnerable groups such as children and youth, teachers, and other selected workers in the government working for children on disaster risk reduction. The same report provided a warning to the local government unit concerned offices that the several types of infrastructure and public utilities within the built-up areas of Asuncion include houses, hospitals, schools, churches, markets, commercial buildings, and government officials, which could be affected by flooding (MGB, 2017).

Thus, eliminating the high risk of disaster in terms of school building infrastructure. There is a need to strengthen the mechanism for infrastructure building projects with the construction firms and institutional management, such as the department of education, ensuring that the standards for building infrastructure and locations. For instance, the in-charge construction firm and school disaster risk reduction and management coordinator should lead the infrastructure training seminar for a safe school building and location.

The Proposed Disaster Resiliency Paradigm for Children Sustainable Education

The new framework on disaster resiliency for children in continuing education illustrated below resulted from the grounded theory approach thematically analyzed earlier from the participants’ views.
This framework aims to facilitate the design of a disaster resiliency program for vulnerable children in continuing education during a dangerous flooding situation by following the critical indicators. The illustration described, the arrows in the outer circle, is the hazard analysis refers to the concrete scenario that may be occurring in the ground. Next is the capacity building for disaster management. Another, saving life and performing arts for disaster management. As a result, I advocate for the inclusive involvement of vulnerable children and other key groups to enhance institutional coordination and processes and construct better and safer infrastructure and locations.

Furthermore, the terms investigated are defining in the following sequence. A disaster resilience program is a planned, thorough intervention program based on the new framework indicators identified in this study. Resilience implies that children's engagement in catastrophe risk reduction initiatives will incorporate in future policy debates. When children go unnoticed, the entire community suffers (Manyena et al., 2008). Furthermore, engagement in families, schools, cultural or religious events, and extracurricular activities may improve children's resilience. Children's resilience increases when they believe they are valuable and valued for their efforts (Gurwitch et al., 2007).

**Hazard Analysis.** The assessment of hazard vulnerability and risk, such as flooding, earthquakes, and fires, is a critical component of the disaster resilience framework for children. We shall not engage in disaster risk reduction and management actions unless risks are correctly and assessed. It will also direct the most appropriate disaster assistance program for children and other vulnerable sectors in the area.

The SENDAI framework for disaster risk reduction 2015-2030 seeks to ensure that everyone, particularly children, understands disasters, hazards, risks, and vulnerability. It will assist everyone in identifying risks, preparing for them, preventing them from becoming catastrophes, and keep themselves, others, and things safe (UNIDSR, 2015).

**Capacity Building.** The reactive approach to disaster preparedness jeopardizes the most vulnerable groups, such as children. The only way forward is to enhance the cohesiveness of the groups above through related training that will prepare them ahead of time and make them more resilient rather than impulsive. Having proactive management will increase knowledge and skills and pave the way for more vital coordination and communication systems.
Research findings strongly indicate that children should include in disaster risk reduction planning and decision-making in all communities with passion and on their terms. They may require assistance in obtaining the blessing of their parents, teachers, and other community members as required (Mitchell et al., 2009).

Furthermore, the SENDAI framework stressed the need to establish unity of effort with local leaders, government, chiefs, and international agencies before, during, and after catastrophes. They should all have clear strategies in place to prevent significant calamities from occurring when a strike occurs.

**Saving Life.** A disaster resilience framework must include emergency response for children, such as first aid and search and rescue activities. According to Philippine law, Republic Act, 10121 of 2010, states the principles of disaster response, on the provision and preservation of life, and meeting the basic subsistence needs of the affected population based on acceptable standards during or immediately following a disaster, towards safer, adaptive, disaster-resilient Filipino communities toward sustainable development. According to the SENDAI framework, investing in disaster risk reduction for resilience is a great way to spend money since it helps long-term development.

**Performing arts.** Mobilizing creativity and ingenuity will aid in the recovery of the children whom the disaster has impacted. They will be able to express and release the suppressed emotions and trauma that have been stored during and after the disaster. According to the literature assessment, rehabilitating disaster-affected populations, particularly vulnerable children, through psychosocial intervention is a critical element of post-disaster operations, particularly for children. Children who are equipped and nurtured to assist and participate in the aforementioned creative interventions, such as performing arts, may help reconstruct the community very rapidly. SENDAI Framework International emphasizes this.

**Inclusive Participation.** One of the most important signs is that by integrating children without prejudice and other vulnerable sectors in disaster risk reduction efforts, an environment can swiftly fight back and develop better. According to studies, children's active engagement is vital in developing participatory approaches for disaster preparedness. Call for child-centered research techniques and approaches that recognize children's efforts, capacities, and understandings, as well as respect for all children's voices (King et al., 2013 and Tanner 2010). Thus, include children in disaster preparedness builds a more robust environment for people of all ages, genders, and cultures.

**Coordination and Mechanism.** Coordination and processes among disaster actors, such as inter-agency structures, should be strengthened and inventive. Should strengthen the strategy by encouraging multi-partnerships, such as parent and teacher associations, the private sector, and other vulnerable groups, to participate and mobilize for disaster resiliency programs such as hazard analysis, capacity building, life-saving courses, and performing arts to rebuild better. The Federal Emergency Management Agency Strategic Plan, 2014-2018, stressed the need to build organizations with defined results, such as an effective and motivated workforce, acknowledgment of its mission, and performance excellence.

**Safe infrastructure and location.** School infrastructure and location are significant indicators to consider when creating a program for children's disaster resilience.

Previous research has indicated that while capacitating children, issues relevant to infrastructure resiliency must include. These children should be educated to monitor infrastructure and identify risks in order to create a safer environment. On the other hand, some studies have argued that contractors for infrastructure projects who demonstrate recurrent incapability should be ejected and blocklisted from the bidding process. Before the assignment, construction specialists and staff should train on integrating infrastructure resilience (ADPC, 2008).

According to the Hyogo Framework 2005-2015. There is a need to strengthen the mechanism for infrastructure building projects with construction firms and institutional management, such as the department of education, to ensure that the standards for building infrastructure and location are safe to eliminate the high risk of disaster school building infrastructure. For example, the construction company in charge and the school disaster risk reduction and management coordinator should lead the infrastructure training seminar for a safe school building and location.

In general, the newly revealed framework is restricted and precise, with a few indicators focusing on hazard analysis, risk and vulnerability capacity assessment on disaster risk reduction management and capacity.
development, creating life-saving abilities, and performing arts. These metrics are geared toward encouraging children, parents and teachers, and other vulnerable groups to participate and jointly enhance institutional coordination and processes for a safer infrastructure and location for developing a better society.

IV. SUMMARY

The method used mainly proactive program evaluation (Owen, 2006.), which maximized primary and secondary data. It engaged an open-ended guide question through an interview guide protocol validated by the group of experts and used purposive sampling. In contrast, the data analysis used grounded theory (Strauss and Glaser, 1987). Moreover, illustration in drawing the new disaster resiliency framework for children in education.

The overall views of the informants on disaster resiliency for children are the lack of understanding of the disaster, inadequate knowledge of mitigation and prevention, reactive disaster preparedness, lack of capacity for disaster recovery, lack of capacity for emergency response, lack of capacity for disaster management, and the lack of preparedness and response.

The components of disaster resiliency for children are hazard analysis, capacity building, life-saving, and performing arts. Those indicators link towards inclusive participation, coordination and mechanism, safe infrastructure, and location. The framework drawn explained according to its relationships and connections to disaster resiliency of children in education.

V. CONCLUSION

The research study is inconclusive since the approach utilized is qualitative exploratory in character. As a result, future research may utilize these findings as a foundation for replicating different global outlooks and viewpoints.

Recommendation

The recommendations of the study are as follows:

To strengthen the coordination and mechanisms of the duty bearer institutions to ensure the inclusive participation of children, parents, and teachers in disaster resiliency projects. Institutions such as the National Disaster Risk Reduction and Management Council go down the lines from the regional level to provincial, municipal, and barangay. Other institutions like the Department of Education (DepEd), including the Student Government's participation Council well.

Mandating the retraining orientation on disaster proof-infrastructure building and standards to the construction firms, the Department of Education focal for disaster risk reduction and management, the policymakers from the National Disaster Risk Reduction and Management Council, regional, provincial, municipal, and Barangay local government units, and other institutions like the Department of Education (DepEd), including the participation of the Student Government Council as well.

The congressional oversight committee in the house of congress for disaster resiliency and the future researchers may use this research as a baseline for amending or developing the law about a short course program on disaster resiliency requiring children, including parents, teachers, and other vulnerable populations affected. To emphasize in the program about the hazard analysis, capacity building, saving life skills, and performing arts for post-trauma with children incoherent to international standards and policies.

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REFERENCES


Y. Eker, M. I. (2018). “Disaster resilient society with youth” project of the civil defense organization aiming disaster risks reduction. The international archives of the photogrammetry, remote sensing, and spatial information sciences, 1-5.