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TEACHING MODEL FOR DISASTER PREPAREDNESS SCHOOL BASED EARTHQUAKE PRONE EARTHQUAKE IN LOMBOK

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Abstract. The problem in this research is that the teaching of school-based earthquake disaster preparedness in Lombok has not been optimal. In fact, the island of Lombok is an area with a high level of vulnerability to earthquakes. This is because one of them is the Flores Thrust which stretches from the eastern tip of the Flores Sea to the north of Bali. Thus in this study the main objective is to develop a preparedness teaching model for earthquake-prone schools. Where earthquake disaster preparedness is all efforts and activities carried out before a natural disaster occurs, during a disaster and immediately after a disaster to quickly and effectively respond to the situation or situation. The research method used is a research and development approach (Research & Development). The results showed several results including; First, the use of this preparedness teaching model shows that schools have more knowledge as a result of modeling in learning; Second, the exposure of the functions and responsibilities of one of the main leading sectors in disaster management; and The three resulting teaching models have simplified disaster management in schools because they are integrated with Social Science learning so that they are easily realized. So with the model of teaching student preparedness it will be more effective and efficient in order to improve their ability to face earthquakes that can occur at any time.

Keywords**:** Preparedness; Disasters; Schools

I. INTRODUCTION

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History shows that long before 2018 there were many earthquakes in Lombok, but they did not get too much attention from the world community. In 1257, there was a volcanic eruption and an earthquake for seven consecutive days followed by a tsunami. Then in 1815, 1856, 1970, 1977, 1978, 1979, 2000, 2013, and 2016. This series of events occurred because all active plates in Indonesia, including the Indo-Australian plate that hit under the island of Lombok moved at an average speed. about 7 cm per year.

Based on the results of the analysis, the earthquake that occurred in 2018 arose because in the north of Flores to Lombok there were faults or faults that extended from Flores to Lombok. This fault was in response to pressure from the Australian Continent. The fault which is called the Flores Thrust (Flores Rising Fault) is under the sea. From the eastern end of the Flores Sea, the seabed is broken, where the northern part slides down. The fault can be followed

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clearly as far as Lombok. In the north of Bali, deformation is weaker or not as strong as in the Lombok part.

Therefore, reflecting on the various earthquake events above, the government has prepared preventive efforts by making various legal foundations for disaster management. In the area of education also are also Regulation of the National Disaster Management Agency Number. 04 of 2012 concerning guidelines for implementing disaster-safe schools/madrasahs that can be used by schools and madrasas in honing and implementing preparedness in schools.

The existence of laws and other regulations is actually sufficient to provide an understanding for every person or individual in the school environment regarding the right to social protection and also a sense of security, especially for school communities that are vulnerable to disasters. Then they are also entitled to receive education, training, and skills in disaster management. Furthermore, the most important thing is the obligation of the school community itself in maintaining a harmonious social life, maintaining balance, harmony, and also preserving the environmental functions in the school. One more thing that is important from the obligation is to provide true, accurate and accurate information to the school community regarding disaster management.

The fact is that so far, the rights and obligations of the school community as explained by the various regulations are very few, even almost never implemented. The rights of the school community such as education, training and skills in dealing with natural disasters, especially earthquakes, are almost never provided by the government or other institutions. The school community in Lombok is completely layman and does not understand how to deal with the arrival of earthquakes that have continued for several weeks. As a result of the school community's ignorance of how to act and act at the time of this disaster, the loss of property was so great that even lives were lost.

In educational institutions the impact of the Lombok earthquake is very complex. Based on data from the National Secretary for the Disaster Safe Education Unit of the Indonesian Ministry of Education and Culture, overall schools and students affected by the 2018 Lombok Earthquake series reached tens of thousands. More detailed data on education units affected by the earthquake in Lombok are presented in Table I.

TABLE I
DATA FOR PRIMARY AND SECONDARY EDUCATION UNITS AFFECTED BY THE LOMBOK EARTHQUAKE

Level	Affected Education Units	Number of Students Affected	Broken Classroom	Students & Teachers Fleeing	Student Victims
PAUD	264	13,720	4,713	59,553	134
SD	639	82,064			
Junior High	155	37,353			
High school	72	47,735			
SMK	56	37,209			
SLB	8	412			
total	**1,194**	**218,493**	**4,713**	**59,553**	**134**

Source: The National Secretariat for SPAB KEMDIKBUD 2019

Likewise, the loss of the Lombok earthquake disaster on schools and madrasas affected in several districts in Lombok reached thousands of schools. Based on data from the National Secretary of the Disaster Safe Education Unit as a whole the School & Madrasah affected per district by the 2018 Lombok Earthquake series can be seen in Table II.

TABLE II
AFFECTED SCHOOL AND MADRASAHS BY REGENCY

Regency/City	School	Madrasah
Mataram City	84	52
West Lombok	205	106
central Lombok	140	77
East Lombok	204	97
North Lombok	294	102
total	**927**	**434**

Source: DAPODIK Ministry of Education and Culture 2019

Connecting the various explanations above, it is actually preparedness that is the most important thing and must be built in the school community. Experience shows that the destruction caused by disasters can be reduced significantly if everyone is better prepared for disasters. School as an education center that not only provides knowledge but also provisions for survival plays a very important role. Students who are the fastest learning participants and are not only able to integrate new knowledge into everyday life but also become a source of knowledge for families and communities regarding healthy and safe behavior that is obtained in school. Therefore, earthquake disaster preparedness must be one of the focuses in schools by empowering students to understand disaster warning signs and steps that can be taken to reduce the risk of earthquake disasters (KEMDIKBUD, 2009).

A strategic step that can be taken is to provide preparedness teaching to schools, especially to the school community. Some materials that can be trained include earthquake preparedness and management techniques. Techniques include preparedness before an earthquake disaster or risk reduction phase, self-protection in the event of an earthquake, and evacuation after the earthquake subsides as well as first aid to victims (Dwisiwi et al., 2012). In addition, schools can also be a vehicle for effectivity in providing the effect of transmitting information, knowledge, and skills to the community closest to them. Thus, teaching

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earthquake disaster preparedness in schools is an effective, dynamic and sustainable strategy in the efforts to disseminate disaster education. Systematic, measurable, and implementative efforts to improve the capacity of school residents will undoubtedly reduce the impact of disaster risk in schools.

However, all these expectations are inversely proportional to the facts in schools in Lombok. So far, education that trains earthquake disaster preparedness in schools on the island of Lombok has never been implemented, so that the average student lacks understanding of disaster preparedness. When an earthquake occurs, students feel panic and some students don't know what to do. For this reason, teaching on disaster preparedness must be carried out in schools on the island of Lombok using the Social Science learning channel. Disaster preparedness teaching is also very much needed to reduce the negative impact of an earthquake.

Therefore, reflecting on the earthquake disaster, the mindset of every individual who cares about the school community must be changed immediately. As is known this fact for research quake not much moved even if there were but it was not the primary focus of the institution. Even if there is, it is due to the efforts of researchers by collaborating with foreign partners. How can a country that is surrounded by earthquakes and volcanoes not care, we are just surprised if the disaster comes, so that an extraordinary effort in all fields must be invested from the start to minimize losses and casualties from this disaster as early as possible, so research on " Teaching Model Earthquake Disaster Preparedness Based on Schools Prone to Earthquakes in Lombok "is a first breakthrough to provide basic knowledge to schools and young people especially the school community to better understand how to deal with earthquake disasters.

II. Literature Review

The term preparedness by experts who have worked in this field such as Susetyo (2006), Sutton and Tierney (2006) has a similar opinion in that they say that disaster preparedness is part of pre-disaster activities and efforts that aim to develop operational capabilities and facilitate an effective response when a disaster occurs so that the possibility of avoiding casualties, property loss and changes in the order of community life in the future can run optimally. Meanwhile, Kent (1994) provides a broader explanation, which states that preparedness is to minimize the adverse effects of a hazard through effective preventive measures, rehabilitation and recovery to ensure timely arrangement and delivery of aid and assistance after a disaster occurs. and effective.

A more complex explanation is given by Affeltranger et al. (2007), preparedness is defined as activities and steps taken in advance to ensure an effective response to the impact of a hazard, including by issuing timely and effective early warnings and by moving the population. and property temporarily from a threatened location. Meanwhile, Fauziah (2006) and Urata (2009) further explain that the activity of disaster preparedness is to form an integral part of the national system which is responsible for developing disaster management plans and programs that can be carried out through disaster management education in anticipation of when it occurs. disaster, disaster prevention training, checking and maintaining disaster prevention equipment facilities and medical facilities, as well as building a relief network system.

Referring to the above explanation, preparedness is basically an action taken in anticipation of a disaster to ensure that the actions taken can be implemented appropriately and effectively during and after a disaster. Where are the things that can be done to improve preparedness in the face of disasters, including: (1) Training on how to save ourselves and others around us during a disaster, (2) Coordination between related parties, who does what during an emergency, as well as efforts to evacuate to a safe place, (3) Preparing emergency equipment when a disaster occurs, (4) How to provide first aid to people who are injured during a disaster, and (5) Efforts made for rapid recovery pat, especially mental recovery.

Then in an effort to provide knowledge about preparedness to schools to maximize its role, Khairuddin et al., (2010) explained that disaster preparedness can be provided on a multilevel basis, at the school level and at the class level which is the first step in building disaster resilience for the entire community. In an effort to improve the preparedness of schools in facing an earthquake take several steps include the development of procedure and action in schools to facilitate coordination and responses are swiftly and effectively when it occurs disasters (OSDFS, 2007). Preparedness in schools can also be in the form of pre- establishment of command posts, evacuation areas, disaster teams and their roles, preparation of equipment and supplies, simulations and preparedness practices with partners from multi-agencies (IFC, 2010). It's significant role in the preparedness of the school is the school that has the ability to cope with disasters in the environment surrounding the be measured of plan reduction of disaster (pre- disaster, disaster emergency, and after a disaster), logistics, security in the environment of learning, infrastructure, system of emergency, procedure operations are standardized, and early warning systems.

In order to make these various preparedness efforts a success, a learning effort with various pre-programmed teaching models is a solution for providing knowledge and training to schools. Fisher considers the model as an analogy of a phenomenon by selecting parts, properties or components that are considered important to be abstracted as an informal picture. Meanwhile, McQuail and Windahl (1981) wrote, "Model is a depiction of a part or a reality which is deliberately made simple in graphic form". McQuail and Windahl's more explicit definition states that a model is a picture (not just a picture) in the form of a graph of a simplified part or whole reality.

Based on the definitions and explanations of some of these experts, a model is a visualization in the form of a graph or diagram of the reality of both processes and structures (including theories and formulas) which are

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simplified so that they are easy to understand by highlighting elements or elements that are considered important. Models can also be theoretical schemes for application to be tested or derived into propositions. So, a model can be in the form of a visualization of the process, structure, definition, formula, even theory so that it is simple and easy to understand so that it can be used as a framework reference.

It can be understood also, that the model is a picture of the real world which is complex and theoretically simplified. Because it is so close to the theory, especially in the relation between elements or components which can be concepts or even variables, the model can be disguised as a theory. However, even though the model can be used to consider it in the form of a prediction of a problem, it is different from the theory which has been "convincing" from the start because it has been tested. So the model can be used to consider variable relations, but it is not as strong as theory in terms of predictions.

III. Methodology

This research undertaken examines and adapts the implementation of a preparedness teaching model integrated into Social Science education at junior Middle School in Lombok. This research is expected to produce an innovative socialization model that can be implemented in the context of schooling in Lombok. The research that the author is doing is not purely on the development of a completely new preparedness teaching model, but on the adaptation of an existing teaching model to be implemented in the context of schooling in Lombok.

Because research is concerned with the adaptation and implementation of teaching models, as an educational product, the research approach or model that is deemed appropriate for use in this research is the research and development approach developed by Borg and Gall (1983, 1989). In this regard, the preparedness teaching model is seen as an educational product that will be developed (adapted) and validated through the research and development process. The research and development process or cycle in general includes reviewing and analyzing literature and research findings relevant to the product to be developed, developing educational products based on research findings, field testing or product validation, and revising products based on field testing or validation.

The steps in this research and development can be explained as follows. First, a preliminary study, which includes the activity of reviewing the literature, in particular reviewing (reviewing) the latest research findings, and gathering information from schools by providing questionnaires and interviews with students and teachers; Second, prepared and adapted a preparedness teaching model that is integrated into Social Science education, which will be implemented through this research. This teaching model is designed for 4 to 6 week meetings, consisting of 2 hours of lessons per week. The stages of modeling the model include the following activities: (1) Preparation of a rough draft of the preparedness teaching model to be implemented; (2) Expert Validation: The first stage of validating this teaching model is to ask several education experts and Social Science education practitioners to provide consideration, assessment, and input on the model to be implemented; (3) Model Limited Trial; The limited trial of this preparedness teaching model was carried out by the researcher himself in collaboration with two Social Science education teachers; and (4) Main Revision of Mode. The main revision of the model is based on suggestions and recommendations from education experts and teachers as well as the results of limited trials. Third, Empirical Model Validation. This stage is directed at validating or testing the effectiveness of the preparedness teaching model that is integrated into Social Science education in Junior High Schools. In empirical validation of this model, the researcher gave pre-test and post-test to students who accepted the implementation of this model. In addition, to obtain more comprehensive data about the impact of the preparedness teaching model on student behavior in schools in implementing preparedness strategies, the researcher made observations (observations) on students who accepted the implementation of the model. The results of empirical model validation can provide feedback for the final revision of the model. The final revision result which is based on feedback from empirical validation is the final product of a developed model that is ready to be disseminated (disseminated) and applied.

The stages of the research and adaptation of the preparedness socialization model in this study can be illustrated as in Fig. 1.

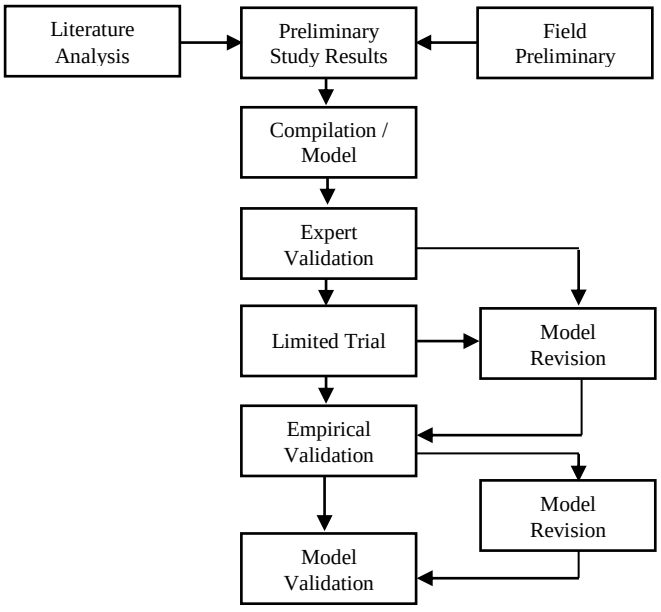

Fig. 1 Research Flow and Adaptation of the Model

IV. Results and Discussion

A. Results

From research and adapting the implementation of a preparedness teaching model that is integrated into the Social Science education of Junior High Schools in Lombok,

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the research on " Teaching Model for Earthquake Disaster Preparedness Based on Earthquake Prone Schools in Lombok " produces findings. as follows.

First, the context of the benefits of research on "Teaching Model for Earthquake Disaster Preparedness Based on Schools for Earthquake Prone in Lombok" has the leverage to strengthen the national innovation system, especially in terms of creating added value and economic, public and academic productivity to increase the nation's competitiveness. an organizational approach to strengthening national innovation. Directorate General of Strengthening Innovation at the Ministry of Research and Technology. The point is that this research will have a beneficial impact, namely the creation of added value both academically and increasing the productivity of the community so that it can have better competitiveness because schools have knowledge as a result of modeling in research.

Second, the efforts made by the school. To meet the needs of the community school in holding the teaching of earthquake preparedness based schools, has made the air like an effort to improve preparedness through learning of Social Sciences that integrate preparedness material thematically based ma s ne of appearing in public, especially in the district of North Lombok. This program is implemented in a participatory manner together with the elements of the community schools SMP all districts of North Lombok which involve parties - parties related to Disaster Management, held on August to December 2019. Through these activities, efforts to teach school-based earthquake disaster preparedness have been implemented. This program aims to build school community preparedness in facing the threat of an earthquake. The preparedness stages that have been implemented include; disaster risk assessment, creation of a map of earthquake risk area, the determination of evacuation lines and installation of signs - signs for evacuation, establishing early warning information systems, education and training in disaster. Meanwhile, the stages of preparedness that have not been implemented are compiling contingency plans, conducting internal and external coordination, mobilizing resources, developing response mechanisms, and conducting routine rehearsals/simulations.

Third, the Leading sector in the process of teaching earthquake preparedness. Leading sector in disaster management, in school or out of school is through the optimization of the role and functions of the Disaster Management Agency Regions in giving guidance to the school community. The Regional Disaster Management Agency for North Lombok Regency is inseparable from internal and external environmental conditions as well as its position, main duties and functions which are inseparable from the vision and mission of the Regional Head. The direction of policy in an effort to improve clean and accountable governance in accordance with the duties and functions of the Regional Disaster Management Agency of North Lombok Regency in the Disaster Management program in North Lombok can be more optimal in synergy with the school community, several policies include: (1) Increasing the quality and quantity of sources human resources of regional disaster management administrators and supported by adequate disaster management infrastructure; (2) Optimizing professional guidance, education and training, technical guidance for disaster management simulation activities for various disaster management programs / activities; (3) Improve the quality of community services through the Rapid Reaction program, monitoring / supervising disaster events and overcoming efforts; and (4) Increasing the participation of the community and the business world in disaster management efforts.

The programs implemented by the Regional Disaster Management Agency of North Lombok Regency in synergy with the school community regarding efforts to build school-based disaster preparedness have been implemented, although they are still in a limited scope. An example of a program being implemented is the provision of disaster management training for teachers or school principals in North Lombok Regency. This program is routinely implemented every year, with an average of 50 participants per batch per year. The Regional Disaster Management Agency of North Lombok Regency rejected the meaning of priority for school-based disaster management training, but this was limited by the available budget capacity. However, the school's participation in conducting various disaster preparedness trainings was widely opened by the Regional Disaster Management Agency of North Lombok Regency. Regarding the position of school-based disaster preparedness in the 2013 curriculum at the junior high school level in North Lombok Regency, the results of the research show that currently the disaster preparedness curriculum is already in social science learning but the fact is that learning about earthquake disasters before an earthquake is taught improperly.

Besides being taught through social science learning, efforts to build school-based preparedness in North Lombok are extracurricular in nature, usually combined with scouting / scouting activities. Even with such activities, it has gone well and provides an understanding of the importance of school-based disaster preparedness. In the coordinative system, school -based disaster preparedness in North Lombok Regency has so far not been coordinated between organizations. In the sense that the Regional Disaster Management Agency of North Lombok Regency is still running limited to implementing independent agency programs. Not to be implemented in coordination with the District Education Office North Lombok who became the leading sector in the education levels of junior high school. In addition to involving the school, Disaster Management Agency Regional District North Lombok also made various efforts of community-based disaster preparedness. The results showed that the BPDB North Lombok Regency has formed a disaster prepared village. As of May 2020, there is already 1 disaster prepared village, namely Kayangan Village, North Lombok. This disaster preparedness village is an effort to teach disaster preparedness. It is hoped that there will be more and more community and community based

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disaster preparedness teaching agencies, so that disaster risk can be minimized.

Fourth, Disaster Management in Schools. The Ministry of Education and Culture through the Bureau of Planning and Overseas Cooperation, in collaboration with UNICEF, has issued a module on education and disaster risk management, which consists of Modules 1- Pillar 1: Safe School Facilities; Modules 2- Pillar 2: Disaster Management in Schools; and Module 3- Pillar 3: Disaster Risk Reduction and Prevention Education.

In these three modules, what is meant by school is schools under the auspices of the Ministry of Education and Culture and madrasas under the auspices of the Ministry of Religion. The preparation of these reference modules is the result of collaboration between the Bureau of Planning and Overseas Cooperation and UNICEF Indonesia in the Disaster Risk Reduction Program which aims to build communities that are safe from the threat of disasters through various disaster risk reduction efforts. School Disaster Management is an assessment process that is later on followed by the planning of the physical protection, planning the development of the capacity for responding/emergency response, and continuity planning education at the school level each up with education authorities at all levels, both the district / city, province to national.

Disaster Management in Schools is determined through the authorities in the education sector at the national, provincial, district/city level and at the school community level (including students and parents of students), in collaboration with partners in the field of disaster management, to maintain a learning environment that is safe as well as planning the continuity of educational education both in the absence of a disaster and during a disaster, in accordance with international standards.

In line with the spirit of protecting children's rights to protection, security and survival as well as the right to quality and sustainable basic education, the Ministry of Education and Culture intends to be able to disseminate knowledge about disaster risk reduction and safe school facilities and disaster management in schools through teachers and facilitators, one of which is by compiling modules that can be used as references for teachers. The steps taken include mapping the Regulation of the Head of the National Disaster Management Agency Number 4 of 2012 concerning Guidelines for the Implementation of Disaster-Safe Schools / Madrasas for a Comprehensive Safe School Framework, in which this Framework with its three pillars has been agreed by the international community, especially UNISDR as United Nations Agency for Disaster Risk Reduction.

B. Discussion

The conceptual model of teaching school-based earthquake disaster preparedness in social science learning is designed as a basic framework for designing a more operational teaching model in the implementation of model trials. This conceptual model is designed based on the results of a SWOT analysis of the empirical conditions of Social Science learning that have been carried out so far. The preparation of the SWOT analysis is based on several studies, both qualitative and quantitative in nature that involve opinions and input from various parties including principals, teachers, employees, and students, in the hope of obtaining a comprehensive study of the empirical conditions of the preparedness teaching model. The school-based earthquake preparedness teaching model is presented in Fig. 2.

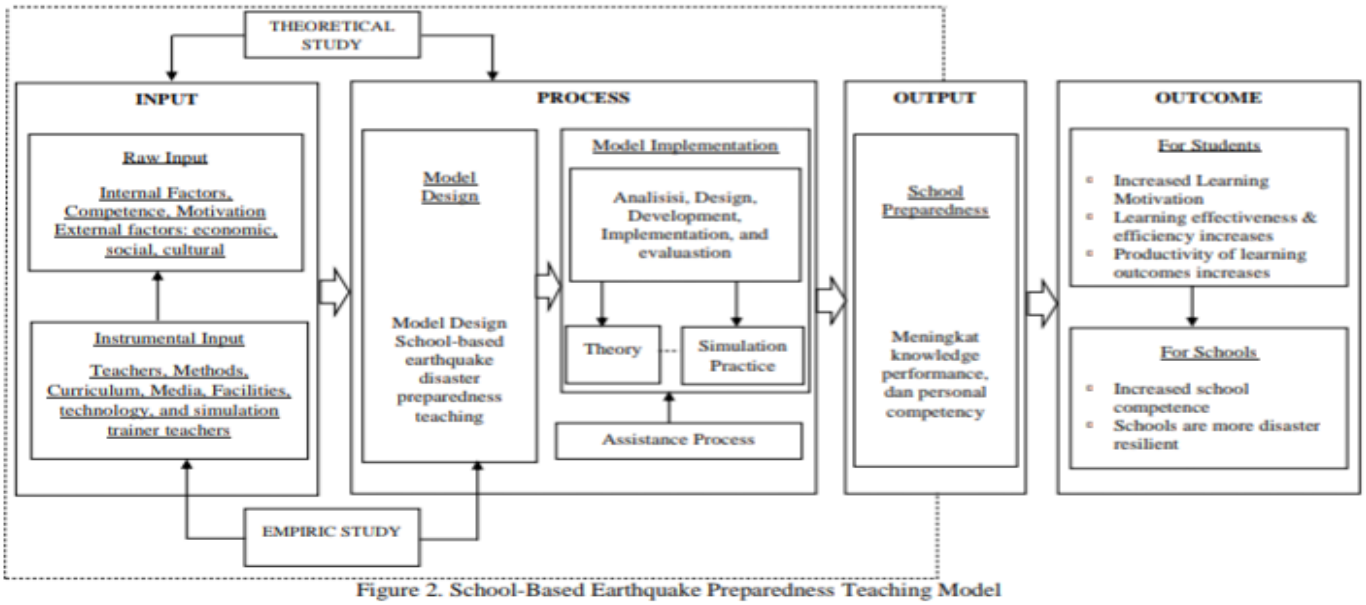

Figure 2. School-Based Earthquake Preparedness Teaching Model

Based on the results of the research that has been done, the reality in earthquake-prone schools shows the importance of teaching earthquake disaster preparedness to be taught through classroom learning where one of the channels that can be used is social science learning. In line with that, the results of Adiyoso and Kanegae's research

(2013) concluded that the effect of schools adopting curriculum-based disaster issues on school children with regard to disaster risk reduction is effective in increasing disaster knowledge, increasing the level of risk perception, individual preparedness and school. An important finding is that the results of implementing curriculum-based disaster issues in schools can raise the preparedness attitude of school children even though it is limited to visits to educational facilities and emergency facilities.

The model used in teaching earthquake disaster preparedness in this study is teaching with an interesting module. Reinforced by the results of Melisa's research, Swandi, Raditya (2012) concluded that Indonesian children need to be provided with information about a culture of self-protection against disasters. You do this by providing information that is interesting to them and easy for children to understand and understand. This information can be packaged in the form of educational games. Arifianti (2011) the implementation of education is one of the media, namely books which are used as a source to prepare children for disaster learning from an early age. This book is only one medium, there are many other innovative media that can be developed to complement disaster learning activities. The difference between this model and the learning model used for hate education is that this model is integrated with Social Science subject matter thematically based on the problems that arise and is packaged with earthquake disaster simulation activities involving the school community. In addition, this model contains three pieces of information, namely types of earthquakes, preparedness efforts, and rescue efforts in the event of a disaster. This model packs information on earthquake disasters that occurred in Lombok. The three pieces of information are packaged using the themes of the problems related to preparedness. A number of junior high schools in North Lombok are currently struggling with various programs to improve the preparedness of all school residents. In line with that Abdurrahman et al. (2011: 107) explained that disaster socialization efforts will be very effective if implemented through school. Every school year there will be new students, and they will be the speakers of disaster mitigation.

From the research process, it was also found that several junior high schools in North Lombok had many programs related to Disaster Preparedness Schools. First, disaster preparedness material is included in the learning curriculum, one of which is through social science learning. According to informants, every Social Science teacher is obliged to insert disaster material in the Learning Implementation Plan based on subject matter that is relevant and can be related to disasters. The Disaster Preparedness School Program which is included in the learning curriculum has been implemented quite well.

Second, the First School in North Lombok has an annual disaster simulation and socialization program. The socialization and simulation programs are fully supported by various non-governmental organizations and governments. These grants from various elements of society are then used to procure preparedness equipment, simulations, make module books, provide disaster preparedness workshops, and so on.

Simulations, outreach or workshops are scheduled every 2 times a year, but before the earthquake occurs these activities are rarely held. Simulation activities or workshops are only held once a year and sometimes they are not even held at all. In line with that, Hidayati et al. (2008) argued that disaster management, which is often limited to short-term reactive responses and less oriented towards proactive preparedness and long-term mitigation efforts, can result in continued decline in preparedness. However, since the 2018 earthquake, various earthquake preparedness programs have been implemented more frequently.

Third, procurement of module books on disaster. The junior high School in North Lombok received assistance for the procurement of the module books, but it was not used properly. The module books are only placed in the showroom as a display in the window and are already in education.

Fourth, the structure and design of school buildings are made according to standards for disaster-resistant buildings. In junior high School in North Lombok building design school built after the earthquake years 2018 and is equipped with maps, evacuation routes, and directions are clear. The building is made of one floor, although the classroom only has one door, the windows are made lower and wider so that they can be used as an emergency evacuation route. Overall, the efforts that have been made by North Lombok Junior High School to improve student preparedness have been quite good in their implementation.

V. Conclusions

The earthquake in Lombok in 2018 was one of the many recent earthquake experiences experienced by this nation. The successive earthquake events in Lombok can be a knowledge that can be taught in depth to schools through a line of learning, one of which is learning social science which is able to become a way to educate school residents to minimize casualties and property in disaster-prone schools in Lombok. From the various explanations of the findings and adapting the learning model above, it can also be concluded that schools in earthquake-prone areas in Lombok have an important role in the transfer of knowledge gained from learning about social science related to earthquakes and efforts to deal with them. To other schools in the context of preparedness. Through social studies learning, disaster-prone schools can become a strong foundation that will preserve knowledge about preparedness which will become an example for other schools on how to deal with earthquakes in Lombok.

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