

The Implementation of School Watching Method to Enhance The Knowledge of Preparedness in The Efforts of Earthquake Disaster Risk Reduction for Elementary School Students Academic Year 2014-2015

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Abstract

The aim of this study was to enhance the students' knowledge towards the dangerous objects in encountering the disaster of earthquake. The study used a qualitative approach and the type was descriptive. The subjects were the combination of 4th grade, 5th grade and 6th grade of Elementary School which consist of 30 students. The data collected through questionnaire distribution of students' knowledge. The result of the study found that students' responses about the dangerous objects in caption I and II had been increased. It could be concluded that by using the method of school watching, the students' knowledge towards the dangerous objects could be increased.

Keywords: *school watching*, knowledge of preparedness, and *disaster risk reduction*

Introduction

The Earth which is already \pm 4.5 billion years old has experienced many dynamic changes continuously affecting the earth's surface. These changes occurred in the presence of either catastrophic natural disasters, non-natural, and even social. Disaster can not be avoided but its risk can be reduced by the community. In order to be able to deal with this phenomenon, it is needed a community preparedness for disasters. The frequent occurrence of earthquakes in the region caused by Indonesia has been an active seismic zone that is located in three tectonic plates including the Eurasian plate, the Indo-Australian and Pacific plates that can shift unpredictably. An earthquake is a vibration or a sudden shift that occurred under the earth's surface that could have been caused by the movement of the earth's crust which occurs when the pressure is too high. [1]. Preparedness is very needed in facing disaster that will occur to reduce the number of victims. One of the places that can cause the victim is a school neighborhood, because schools mostly displaying objects with the thought that the object has been achieved such a trophy, textbooks students, flower vases which are in the classroom, as well as other wall hangings that can assist students in remembering the lessons.

Preparedness is an action taken to improve life safety in the event of a disaster. One way to do is to identify dangerous objects towards disaster phenomenon especially earthquakes, because earthquakes are a movement of the plates that the effect on the surface can drop objects around us, which of ignorance does not rule out the possibility it may cause casualties [2]. On the other hand, these objects may be harmful to students during in the classroom or during in the school environments. Preparedness is a necessary step in disaster management, which must be followed either by the government, private and public, are made in the form of regulations, program planning, funding and development, the relation of institution or disaster preparedness organization [3].

A method that can help students and the school in improving the disaster preparedness is Watching School method with a sense of the activities carried out in schools by record activity places or objects that could endanger their lives when disasters occur especially earthquake . By providing comprehension to the students and the school in recognizing the danger of objects and places around us, it is a thing that should be done with the hope there will not much else killed in incident / disaster occurs, especially students as the future generation who can build and develop their ideas for future advancement. Activities that are undertaken at school through recording around the objects and places which are estimated can be harmful to the elements of school like school teachers, students, administrative staff, and the others when the incident of a disaster called as school watching [4]. Every disaster must be has a risk either severely damaged or slightly damaged. Disaster risk is the potential loss caused by the disaster in a region and a period of time which can be death, injury, life threat, loss of sense of security, damage or loss of property and disruption of community activities. In fact, disaster risk reduction remains low due to the policy made by the government is still less anticipated, which cause there are some disaster areas due to their knowledge about disaster risk reduction is still low. Hence, they have not been able to handle themselves in the incident of disaster. Education is a good medium related activities conducted an earthquake disaster mitigation starting from kindergarten, elementary school, junior high school, senior high school, and college. Particularly, the children who does not know what should they do in case of a disaster and even most of them are victims. Therefore, a socialization pertaining to mitigation is very crucial in education level so that they can save themselves. The Target of increasing proficiency for every community that can perform actions in the event of a disaster based on the function of their circle [5].

The cause of many casualties resulting from the earthquake due to the lack of knowledge possessed by the society about disaster and the lack of preparedness when disaster occurs [6]. Further more, the knowledge is the result of remembering an experienced event that have been happened by the doer or victims intentionally or unintentionally, and the knowledge can be done

through directly observation towards an object. In order to keep the knowledge, it should be done a management that can be applied in our daily life [8]. Therefore, we conducted a study entitled "The Implementation of School Watching Method to Enhance The Knowledge of Preparedness in The Efforts of Earthquake Disaster Risk Reduction for Elementary School Students Academic Year 2014-2015".

Method

The approach used was qualitative approach and type of study was descriptive study. The study focused on the students' knowledge of preparedness against earthquake disaster by using the method of school watching.

Population and Samples

The population in this study were all students from Elementary School Cot Klieng Aceh Besar, approximately ± 125 students. The samples taken in this study were the combination of 4th grade, 5th grade and 6th grade of Elementary School Cot Klieng which consist of 30 students. The samples used in this study was random sampling technique. Through this study, the students' preparedness knowledge were expected will be increased.

Data Collection and Analyses

The data collection technique in this study was distribution of questionnaires to see the students' responses. The data were analyzed by means of descriptive statistical analysis. Descriptive analysis is used to obtain the answer about the school watching method in order to enhance students' knowledge of the study. The activities of students' responses in this study were collected, and then the analysis was done by providing the student' scores on the questionnaire sheet. The data were analyzed by using the following formula [8]:

$$p = \frac{f}{N} \times 100 \%$$

Where:

p = number required percentage

N = number of cases (number of frequency /number of people)

f = frequency response of each point

Results and Discussion

The research that has been conducted at Elementary School Cot Klieng Aceh Besar for 30 students on the implementation of Watching School method in April to May 2014 based on the data

obtained by twice distributing questionnaire regarding dangerous objects in the time of the study. As for the types of objects that are considered dangerous can be seen in Table 1.

Table 1. Types of dangerous objects

No	The name of Object	No	The name of Object
1	TV and Radio on Shelving Store	22	Indonesian Map
2	Glass Cabinets	23	Electric Cable Pole
3	Bookshelf	24	Electric Stove
4	Hanged Flower Pot	25	Bridge
5	Lift	26	Wooden Cupboard
6	Poster	27	Advertising Board
7	Hanged Objects on the Shelf	28	Eagle Symbol
8	Table TV	29	Window/ Showcase Store
9	Trophy on Wardrobe	30	Flag Pole
10	Hanged Shelf above The Bed	31	Attending Board
11	Drug Cabinets on The Wall	32	Glass window
12	Whiteboard	33	Small Cupboard
13	Photos of President	34	Between Two Gang Wall
14	Mirror on the wall	35	Name Board above The Door
15	Clock	36	Lamp under the Ceiling
16	Bed Besides Glass Window	37	Big Cupboard
17	Doll	38	Walking Stairs
18	Hanged Lamp	39	Photos above The Bed
19	Book On Wall Shelves	40	Table Lamp
20	Gas Tube	41	Sticking AC wall
21	Bees nest in tree	42	Kitchen Tool on Wall

Based on the objects observed by students through the distribution of questionnaires at the first stage with the percentage of caption 1 (first questionnaire) and the percentage of caption 2 (second questionnaire) in Aceh Besar Klieng Cot SD obtained results such as Figure 1.



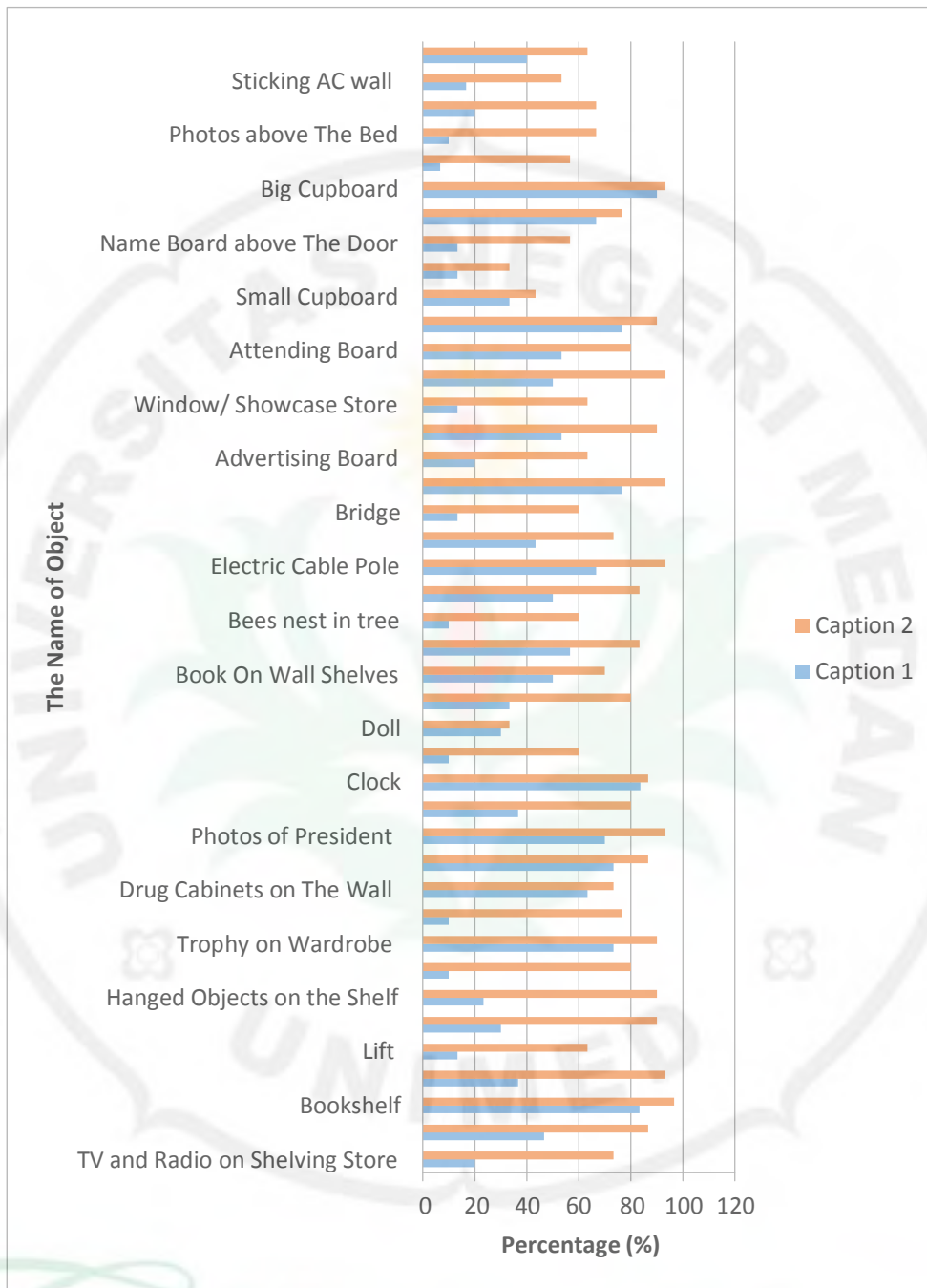


Figure 1. Percentage Chart of Cot Klieng Elementary Students Knowledge towards Dangerous Objects in School Environment

Based on the graph of the questionnaire results shown that students' knowledge of disaster preparedness in the face of an earthquake as seen from the observed objects one by one by a student questionnaire increased from the first to the second is based on the percentage of 1 and percentage of 2. In this study, there are differences in the results society in facing of floods before and after counseling done, where people who have received counseling more readily estimated at 83.8%, while the people who are not ready yet to get counseling in facing disaster estimated at 54.1% [9]. Further preparedness measures undertaken by the public, generally derived from their own experience in facing disaster. Based on the results of research conducted that the identification of people who know the actions that must be performed prior to the extension of preparedness while 33% had done counseling increased to 34%, which is only a little difference because of their panic [10, 11].

Based on the above chart, it can be concluded that the objects observed by the students one by one as a trophy on the table at the time of the first questionnaire that 73.33% of students stated the object was dangerous, but after the screening of a video about the disaster preparedness in facing disaster, it shown that the performance of Elementary students' knowledge is increased become 90.00%.

Conclusion

Based on the research that has been conducted in Cot Klieng Elementary School the students' knowledge about disaster preparedness is totally increased in facing disaster of earthquake through the recording of dangerous objects by implementing School Watching Method.

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