ANALYSIS DISASTER OF BOOKLET MEDIA OF PREPAREDNESS STUDENTS ABOUT DISASTERS IN SENIOR HIGH SCHOOL, SINGKAWANG CITY

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ABSTRACT

This study aims to determine the preparedness of high school students in dealing with natural disasters in Singkawang City, producing media booklet preparedness. Media booklet is an alternative for students in SMA 1, SMA 2 and SMA 6 for supporting learning, knowing the differences in learning outcomes and student response to the application of instructional media booklets disaster mitigation and adaptation. This study uses research methods research and development, the steps taken include 4 resilience namely (1) define (2) design (3) develop (4) dessemiate. The research site is planned at Singkawang Senior High School in the even semester of 2017-2018 school year. The research design used purposive random sampling. The subjects of this study were students of class XI of SMA in Singkawang. Quantitative data analysis with experimental methods and percentage techniques, data collection using preparedness and documentation questionnaires. Data analysis techniques used are anava tests. The prerequisite test used is normality test and t test. The results that validation show that a percentage of 84% and validation to expert media was 77%. Overall the results show that the learning device and media booklet can be used without revision. Hypothesis test results show a comparison of the probability value> 0.05 then Ho is accepted and the probability value <0.05 then Ho is rejected and if the value of sig (2-tailed) is 0.000 <0.05 then Ho is rejected which means the provision of media Booklet in the research has been affect the preparedness of Singkawang Senior High School students. The results of students' preparedness in dealing with disasters show high and very high preparedness values. As well as the combined index value included in the Ready category. The conclusion is Media Booklet is effective in influencing and improving students' preparedness outcomes in dealing with natural disasters in Singkawang

Keywords: Learning Media, Booklet, Preparedness, Natural Disasters

A. INTRODUCTION

West Kalimantan is a lowland and has hundreds of rivers that flow along the Kapuas Valley and the Natuna Sea / Karimata Strait. This plain is also a swampland mixed with peat and mangrove forests. The diversity of plains in West Kalimantan provides good potential for growth in the regions, but there are also threats of disasters that can occur. West Kalimantan which is in the high and medium zone based on the district / city disaster risk index (IRBI, 2013).

West Kalimantan, which has a variety of plains, also has large forests and has peatlands. Based on the data in 2015, West Kalimantan's peatlands were subjected to fire, from the data of Modis Satellite Imagery (Tera dna Aqua) there were 74 hotspots in West Kalimantan (Kalbar.antaranews.com)

Singkawang City which entered the high zone with (score 178) based on

district / city disaster risk index (IRBI, 2013). The data confirms that the risk of disasters occurring in Singkawang City is high so that to prevent losses and victims especially from students in schools in Singkawang City must have preparedness in dealing with disasters. Schools that are a means of transferring knowledge, so that there are efforts from learning received by students for good preparedness of students in dealing with natural disasters that have the potential to occur in their regions.

Preparedness is an action taken in anticipation of a disaster to ensure that the actions taken can be carried out appropriately and effectively at and after a disaster (Krisna S. Pribadi, 2008). Preparedness is intended to deal with conditions immediately after a disaster and recovery efforts to normal conditions. The learning process is carried out by learning and education about disaster to students to improve students' knowledge and preparedness in dealing with natural disasters. Students are expected to be ready in dealing with disasters that might occur in the area where they live.

The learning process that is carried out by teachers towards students is not always smooth and good because of course there are lessons that are difficult to understand directly, so that it will affect the learning process and results of students in the classroom. The application of learning media will attract students' attention so that it can foster learning motivation (Nana Sudjana and Ahmad Rivai, 2010: 2). The role of learning media is very important in influencing the learning process and generating interesting things so that the learning process is not monotonous and students are easier to understand the purpose of geography lessons that discuss preparedness in dealing with natural disasters in Singkawang City.

Learning media also makes it easier for researchers to deliver material and learning objectives and attract students to be active in the learning process. This study useslearning media *Booklet* that will help students to more easily understand learning material. The Media *Booklet* in this study discusses disaster material and invites students to be active and learn about disaster material presented in the *Booklet of* Preparedness in Facing Natural Disasters in Singkawang City.

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B. METHODS

C. Research This research was carried out at SMAN 1 Singkawang, SMAN 2 Singkawang and SMAN 6

Singkawang. Research time is on odd semester of academic year 2017/2018. Research This research is a development research because it is preceded by development then a product trial is conducted to determine students' preparedness in dealing with disasters Development research uses the Thiagarajan model or commonly called the Four-D (4D) method: 1) defines (2) designs (3) develops (4) dessemiate or is adapted into the 4-P model. These 4 stages are steps taken before and become the first (defining) can be defined that disaster education has not developed much learning media in schools, especially in Singkawang City Senior High School. The second stage began with students' educational material in the Singkawang City area which was prone to natural disasters such as floods, droughts and fires which were continued by creating a learning media for Preparedness Books in natural disasters in Singkawang City. To produce learning media that has been validated by the validator, if there is a revision, it will be completed by the author. The Dissemination Stage is an appropriate booklet learning media that will be developed on a broader scale, namely in the research class which aims to integrate students in geography

learning. This study includes two stages, namely designingmedia Booklet and using One Group Pretest Posttest design.Subjects in this study were class X students from SMA 1 Singkawang, SMAN 2 Singkawang and SMAN 6 Singkawang. Research conducted in class X through the learning process with disaster material to find out students' preparedness in dealing with disasters. Knowing the Preparedness of SMAN 1, SMAN 2 and SMAN 6 Singkawang stated in LIPI-UNESCO / ISRD 2006, above preparedness parameters will be used as a category of students' level of preparedness in dealing with natural disasters that are adjusted to index values.

D. RESULTS

The results of this study show a report on the progress of the study with the learning process using media in the *booklet* face of natural disasters. The research was conducted to determine the preparedness of students in SMAN 1 Singkawang, SMAN 2 Singkawang and SMAN 6 Singkawang with the help of media *booklet* before and after being given the media *booklet* so that the level of student preparedness in dealing with disasters and the influence of the use of the booklet was known.

Paired-samples *t test* on this study aimed to examine the differences of samples undergo two treatments. The t test in this study was used to determine the effect of independent variables partially on the dependent variable, whether there was an influence after being given two treatments, using the help of application *SPSS 21*. Criteria if the probability value <0.05 then there was an effect, whereas if the probability value> 0.05, there is no effect of students'

preparedness in dealing with natural disasters before and after being given treatment in the learning process using the media *Booklet.*

Hypothesis testing in this study using a different test *paired sample t-test* usingassistance *SPSS 21*, the purpose is to determine the effect of usinglearning media *Booklet* on students' preparedness in dealing with natural disasters in Singkawang City, the following results are obtained:

1) Preparedness of Students of SMA Negeri 1 Singkawang

Table 1 T-Test

			Paired Sample Test						
		Paired Differences							
		Mean	Std.Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Sebelum - Sesudah	12.333	8.431	1.622	-15.668	-8.998	-7.601	26	.000

Source: Research, data SPSS 21

t test analysis results in Table 1 above explains that the comparison value probability> 0.05 then Ho is accepted and the probability value is <0.05 then Ho is rejected and if the value of *sig (2-tailed) is* 0.000 <0.05 then Ho is rejected which means that the provision oflearning media

Booklet in research has influenced the preparedness of students of SMAN 1 in face natural disasters in Singkawang City. The mean output is 12,333 which is the difference from the average student preparedness before and after being given the media *Booklet.*

2) Student Preparedness of SMA Negeri 2 Singkawang

Table 2

		t	df
Paired Sample Test			
Paired Differences		t	df

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				Sig. (2-tailed)
					Lower	Upper			
Pair 1	Sebelum - Sesudah	12.333	8.431	1.622	-15.668	-8.998	-7.601	26	.000

Source: researchers, data SPSS 21

Based on the calculation of the t test in table 2 explains if the comparison of the probability value> 0.05 then Ho is accepted and if the probability value <0.05 then Ho is rejected. Calculation using *SPSS 21* shows that the value of *sig (2-tailed)* 0,000 <0,05, so Ho is rejected which means that giving themedia *Booklet* in research has affected the preparedness of students of SMAN 2 in dealing with natural disasters in Singkawang in the output also included a mean difference of 9,321 namely difference in average student preparedness in dealing with natural disasters in Singkawang before and after being given the media *Booklet.*

3) Student Preparedness of SMA Negeri 6 Singkawang
Table 3

Paired Sample Test									
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Sebelum - Sesudah	12.333	8.431	1.622	-15.668	-8.998	-7.601	26	.000

Source: Research, data SPSS 21

Based on table 18 t test calculations explained that comparisons probability value> 0 05 then Ho is accepted and if the probability value is <0.05, Ho is rejected. Table 12 explains that the value of *sig (2-tailed) is* 0.000 <0.05, so Ho is rejected, which means that the provision of media *Booklet* has affected students' preparedness in dealing with natural disasters in Singkawang before and after being given the media *Booklet.*

E. CONCLUSION

Conclusion in this study is that media is *booklet* suitable for use in the learning process in the classroom. Media *booklet* proven to improve students' preparedness for natural

disasters in Singkawang. The results showed that learning using the media *booklet* was "very ready".

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