



## Literature Review: Disaster Education for Students and Its Challenges

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### Abstract

This research aims to determine the effect of disaster education on students' disaster preparedness and challenges in implementation. The research method used is literature review or library research by searching for reference data via the Google Scholar search engine. Based on literature review data, it is known that disaster education is successful in increasing students' preparedness for disasters. This was found from several references which found that there was an increase in students' knowledge of natural disasters after receiving disaster education. There are also challenges in disaster education which are divided into two types, namely internal challenges and external challenges. Internal challenges come from within the organizer of disaster education, in this case the school environment, while external challenges come from outside the school that provides disaster education.

**Keywords:** preparedness, disaster, education, students.

### Introduction

Preparedness is a series of activities carried out to anticipate disasters through organization and through appropriate and effective steps.<sup>1</sup> So, disaster preparedness aims to ensure that when a disaster occurs, the community can take appropriate and organized steps. This is deemed necessary because Indonesia is one of the countries with the potential for large natural disasters because Indonesia is surrounded by three world tectonic plates with more than 128 active volcanoes and around 150 rivers.<sup>1</sup>

Therefore, disaster education is important to ensure that the public has good knowledge of disaster preparedness. Students are considered to be the key point of disaster education because they are a cornerstone of the nation's future and are called agents of change. Therefore, this research aims to determine the effect of disaster education on students' disaster preparedness. As a literature review, this research utilizes a database in the form of online journal articles.

## Material and methods

The research method used is literature review or library research by searching for reference data via the Google Scholar search engine. Data searches were carried out using the keywords preparedness, disaster, education, and students. After obtaining reference data, the data is selected based on inclusion and exclusion criteria. The inclusion criteria are national journal articles that match the keywords and were published after 2009 or the last 15 years. The exclusion criteria are journal articles published before 2009. The data analysis technique in this research is a qualitative analysis technique from the reference data obtained. In qualitative research, research is focused on selecting information data, collecting data, analyzing data, interpreting data, and making conclusions related to the findings.<sup>2</sup>

## Results

**Table 1. Literature Review Results**

<b>Writer (Year)</b>	<b>Disaster Education Results</b>	<b>Discussion</b>
Indriasari (2016)	Positive	Of the 31 respondents, the average value of children's preparedness before the simulation was 68.74% and after the simulation was 74%.
Pribadi & Yuliawati (2009)	Positive	The results of the average score of students at SDN Padasuka 2 increased from the previous 35.81 to 41 in the post-test. Likewise at SDN Cirateun, the average student pre-test score was 52.63, increasing to 53.63 in the post-test.
Daud et al. (2014)	Positive	The average of students who answered correctly for each question in the tests carried out increased from 75% before the training to 96.5% after the training.
Angraini et al. (2019)	Positive and Negative	The research results show that disaster education is going well, but there are several inhibiting factors, such as culture, rights-based approaches, sustainability, etc.
ITyas et al. (2020)	Positive and Negative	It shows that students' responses in implementing disaster education activities are quite good. However, several obstacles were found in the implementation of disaster education in these schools, such as a lack of attention from relevant agencies.

## Discussion

### Disaster Education on Student Preparedness

Based on literature review data, it is known that disaster education is successful in increasing students' preparedness for disasters. This was found from several references which found that there was an increase in students' knowledge of natural disasters after receiving disaster education. Several studies conducted pre-tests and post-tests to test students' knowledge of disasters, both before and after disaster education. It was found that the students' post-test scores were better than the pre-test results, which shows the success of disaster education. Meanwhile, disaster education for students is carried out in several

methods, such as disaster preparedness training, disaster simulations, and disaster management team practice.

### **Challenges in Disaster Education**

Based on the results of the literature review, it is known that challenges in disaster education are divided into two types, namely internal challenges and external challenges. Internal challenges originate from within the disaster education organizer, in this case the school environment. This challenge takes the form of ensuring the sustainability of disaster education so that the formation of school institutions that include disaster education material is important, such as UKS, PMR, and School Committees. Apart from that, cooperation is needed from within the school to achieve disaster education goals in accordance with school principles. Further efforts are also needed to ensure disaster education is well received by students with special needs.

External challenges come from outside the school that provides disaster education. External challenges include the lack of attention of government agencies to the implementation of disaster education in schools. The government is considered negligent in managing the renewal of documents in order to fulfill disaster education procedures which will ultimately hamper the education process. Schools are also rarely involved by the government in making regulations regarding disaster education. Apart from that, the special budget funds for disaster education provided by the government are considered insufficient, making it difficult for schools to find additional funds. The availability of facilities and infrastructure in the disaster education process also needs to be considered to ensure the achievement of disaster education goals.

### **Conclusion**

Disaster education is successful in increasing students' preparedness for disasters. There are challenges in implementing disaster education consisting of internal and external challenges.

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### **Disclosure**

The author reports no conflicts of interest in this work.

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