

The Future Perspective of School Flood Disaster Education in Semarang

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Abstract.Data from BPBD in 2022, there are 142 junior high schools affected by the flood disaster. One of the concerns of disaster management is that people are reluctant to start pre-disaster measures at the individual level. Disaster education taught in schools, offers the most important answers for disaster mitigation. This study aims to identify factors that increase student awareness for flood disaster reduction. This study is based on a survey in five junior high schools in Semarang. Different levels of awareness have been defined to identify factors for effective education at each level. The results of the study show that disaster education in schools can currently increase the perspective of flood disaster risk, but students do not yet know the importance of pre-flood disaster and take concrete actions to reduce flood risk. Future disaster education in schools can be an active learning for students. Community involvement is the most important factor in disaster education in schools.

Keywords:future; disaster education; floods

INTRODUCTION

The city of Semarang has a high level of risk of flooding, this can be seen in Figure 1 on the 2022 Flood Vulnerability Map for the City of Semarang. This can increase anxiety in the community, so it needs to be handled in an integrated manner.

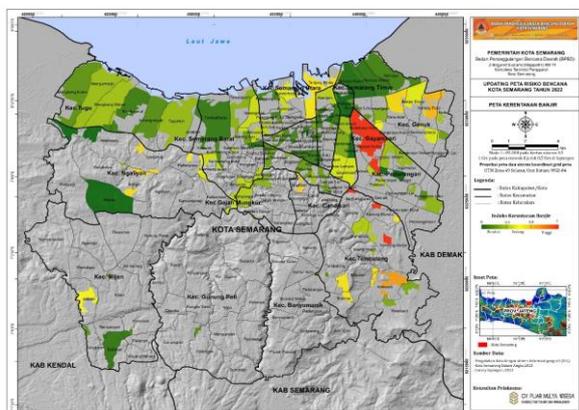


Figure 1. Semarang City Flood Vulnerability Map in 2022

Source: BPBD Semarang City, 2023

Meanwhile, based on the results of the analysis of the documentation that researchers obtained from BPBD Semarang City, there were several schools affected by the 2022 floods. However, researchers limited them to junior high schools. 2022. The legality that regulates disaster prevention efforts is contained in the Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 33 of 2019,

namely in the form of the Disaster Safe Education Unit Program (PSAB)(Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 33 of 2019 concerning Implementation of the Disaster Safe Education Unit Program, 2019; Melvia & Alhadi, 2020; Rifaldi et al., 2023).

The research that has been conducted by Tasantab, et al aims to present the results of a simulation-based learning process by conveying disaster risk management(Tasantab et al., 2023). The result of the research they conducted was that the participants were able to apply their knowledge and demonstrate disaster risk reduction skills. The conclusion that can be drawn from this study is that simulation-based learning as part of a disaster risk management education pedagogy enables students to gain practical experience.

Another study from Tweneboah, et al has the goal of deepening understanding of individual flood disaster mitigation behavior through the theory of self-determination (SDT). However, this research specifically examines the influence of economics, competence, and linkages to motivation that has been determined by individuals as an effort to mitigate floods.(Tweneboah-Koduah et al., 2022).

Research conducted by Neeraj, et al aims to provide an understanding of the post-flood recovery process in India in 2018, as well as analyze how flood disaster recovery efforts are in accordance with the Build Back Better concept.(Neeraj et al., 2020). The results of this research are that the Government is proactive in

making future disaster resilient communities, through owner-driven reconstruction among flood-affected households, supporting local residents in rejuvenating businesses, and creating local-level recovery authorities.

Threats or hazards posed by a disaster that has the potential to cause death, property damage, socio-economic disruption or environmental damage. These hazards may include several latent conditions that may represent a future threat (Kurniawan et al., 2021; Mulianingsih et al., 2022; Suharini et al., 2019).

Previous research on disaster mitigation still produces varying findings. There are differences in the findings from several previous studies, which can provide gaps for conducting further research related to flood disaster mitigation in the city of Semarang and integrating it into social studies learning. The solution offered to overcome this problem is through the perspective of the future of school flood disaster education in Semarang. The purpose of this study is to rely on Durkheim's social facts which sparked a functional structural theory, in disaster mitigation collaboration is needed in the form of perspectives on the future of school flood disaster education in the city of Semarang (Follert, 2020; Juwita et al., 2020; Thompson, 2003).

METHODS

The research analysis method used is qualitative, with the Creswell phenomenological data framework. Creswell explained that phenomenological research emphasizes the critical thinking skills of researchers, that phenomenology is a method for expressing the essence of meaning of a group of individuals with the basic framework of social psychology and philosophy as the analytical knife. (JW Creswell, 2016; WJ Creswell & Creswell, 2018). Data collection techniques used by researchers are questionnaires and interviews. This study focuses on the phenomenon of the perspective of the future of school flood disaster education in Semarang. Theoretically, this study pays attention predominantly to the rationale of social studies, the efforts of teachers to prepare and implement disaster safe schools by paying attention to the future perspective of school flood disaster education in Semarang.

This study was conducted at junior high schools with a high flood disaster risk category. These junior high schools include Semarang State Middle School 4, Semarang State Middle School

36, and Semarang State Middle School 20. The selection of research locations was carried out purposively, namely location selection based on objectives.

RESULTS AND DISCUSSION

The higher the risk level of flood disaster in Semarang City, causing the emergence of anxiety in the community, therefore it is necessary to integrate disaster education in the community (Mulianingsih, 2017). It cannot be denied that education is a key to success. Likewise with knowledge about disaster, it must be increased through education, this is in line with the Hyogo and Sendai Framework (McGee et al., 2016; Pedro Basabe, 2013; Ray-Bennett & Shiroshita, 2019; Sendai Framework for Disaster Risk Reduction 2015-2030, 2015). The Hyogo and Sendai framework states that basically knowledge about disaster is multidisciplinary, involving many studies or other disciplines.

Based on BPBD data for 2022 according to table 1, it states that out of 185 junior high schools, 142 junior high schools were affected by the floods. Flood disasters have been ranked third as the cause of economic losses from all natural disasters throughout the world. Not much different from the city of Semarang, which is a waterfront city that has suffered from floods for a long time.

Table 1. Junior High Schools in Semarang City Affected by Floods

No	Criteria for Flood Disaster Risk Level	Number of Middle Schools
1	High Flood Disaster Risk Level	32 Schools
2	Moderate Flood Disaster Risk Level	60 School
3	Low Flood Disaster Risk Level	50 Schools

Source: bit.do/databencana (accessed January 26, 2023)

Based on the results of interviews and observations in junior high schools which were the object of research, stated that the handling of flood disaster mitigation in the city of Semarang was carried out early, namely carried out fundamentally, by educating the community to be literate in flood disasters, one of which was through schools. Learning carried out in schools can make students aware directly about the

threatening flood disaster and its mitigation efforts. The next step, students can spread the knowledge of flood disaster mitigation to their families and communities in their environment.

The problem of the flood disaster that occurred in the city of Semarang, of course, this flood disaster can be overcome by growing the value of environmental awareness through education without being limited to the school level. In this study, it was limited to the junior high school level. Social studies as one of the subjects at the junior high school level carries the mission of seeing human problems as a whole, not only in terms of behavior, but in a broader perspective, namely social life and the natural surroundings.

The flood disaster that occurred in Semarang City was harmonized through social studies education. Material about the diversity of the surrounding environment in grade 7 junior high school, describes the phenomenon of the flood disaster in the city of Semarang.

CONCLUSION

The Semarang City flood disaster in 2022 had an impact on most educational units in Semarang City. A total of 142 junior high schools were affected by the floods. On the other hand, social studies teachers should integrate social studies into learning. Relying on Durkheim's social facts which sparked a structural-functional theory, disaster mitigation requires the collaboration of pentahelix elements. However, according to the theory of critical pedagogy from Freire, it states that the disaster mitigation learning model refers to the learning process, while in the independent curriculum there is no disaster mitigation in social studies learning.

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