

DISASTER PREPAREDNESS TRAINING FOR STUDENTS OF MI MUHAMMADIYAH BLEMBEM GUNUNGKIDUL

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Abstract

Madrasah Ibtidaiyah (MI) Muhammadiyah Blembem is an elementary school located in Candirejo Village, Kapanewon Semin, Gunungkidul Regency. The school is accredited by B, with a total of 93 students. In 2022 there was a landslide disaster in a location close to the school, and it caused casualties and the loss of several houses due to being buried. Several students living in the affected areas also felt the impact of the landslide disaster which caused trauma. Therefore, students need a good understanding of the threat of disasters at school locations and the preparedness they must have. This service community activity intends to provide an understanding of disaster to students through workshops and games. After participating in this disaster workshop, students are expected to know the condition of the school and the disaster threats that exist in the school environment and have good preparedness if a disaster does occur in the future. The disaster workshop activity was held on March 4, 2023, at the MI Muhammadiyah Blembem location and was attended by 39 students from classes 3, 4, and 5. Participants are involved in games, singing, and watching videos to provide a good understanding of disaster preparedness. Based on the pretest and post-test questionnaires, the results obtained were 10 - 80% of students felt they had gained a new understanding of the disaster. This understanding is expected to increase student preparedness in dealing with disasters and eliminate trauma.

Keywords: preparedness, disaster education, disaster trauma.

Abstrak

Madrasah Ibtidaiyah (MI) Muhammadiyah Blembem setara dengan Sekolah Dasar yang terletak di Desa Candirejo, Kapanewon Semin, Kabupaten Gunungkidul. Sekolah ini telah terakreditasi B, dengan jumlah siswa 93 anak. Pada tahun 2022 telah terjadi bencana tanah longsor di lokasi yang sangat dekat dengan sekolah, dan menimbulkan korban jiwa serta hilangnya beberapa rumah karena tertimbun. Beberapa siswa MI Muhammadiyah Blembem tinggal di wilayah terdampak tanah longsor tersebut, dan merasakan bencana tanah longsor, sehingga timbul trauma. Hal tersebut terjadi karena siswa belum memiliki pemahaman yang baik tentang ancaman bencana di lokasi sekolah dan kesiapsiagaan yang harus mereka miliki. Kegiatan pengabdian masyarakat ini bermaksud untuk memberikan pemahaman tentang kebencanaan kepada siswa melalui workshop dan games. Setelah mengikuti workshop kebencanaan ini, siswa diharapkan mengetahui kondisi sekolah dan ancaman bencana yang ada di lingkungan sekolah, serta memiliki kesiapsiagaan yang baik jika terjadi bencana di kemudian hari. Kegiatan workshop kebencanaan dilaksanakan pada tanggal 04 Maret 2023 di lokasi MI Muhammadiyah Blembem dan diikuti oleh 39 siswa dari kelas 3, 4, dan 5. Peserta dilibatkan dalam permainan, bernyanyi, dan menonton video untuk memberikan pemahaman yang baik tentang kesiapsiagaan bencana. Berdasarkan pretest dan posttest diperoleh hasil 10 - 80% siswa merasa mendapatkan pemahaman baru tentang bencana. Pemahaman ini diharapkan dapat meningkatkan kesiapsiagaan siswa dalam menghadapi bencana di kemudian hari dan menghilangkan trauma..

Kata kunci: kesiapsiagaan, Pendidikan kebencanaan, trauma bencana.

INTRODUCTION

Candirejo village is in Kapanewon Semin, Gunungkidul Regency, Special Region of Yogyakarta. Candirejo Village has an area of 1,112 ha and a population of 8,036 people which is over 9 hamlets (<https://desacandirejo-semin.gunungkidulkab.go.id/first>)

One of the existing hamlets is called Blembem which has the Blembem Muhammadiyah Elementary School (Madrasah Ibtidaiyah Muhammadiyah). Based on the topographical conditions, Gunungkidul Regency is divided into 3 development zones, namely the North Zone, the Middle Zone, and the South Zone. Candirejo Village is an area in the northern zone, with a land elevation above sea level between 200-300 m, where almost the entire area is hills/limestone mountains. Even though it is located above a relatively high elevation, the condition of the ground surface is relatively flat, so that large vehicles can access this area. There are also large factories that are already established. Candirejo Village is a strategic area as industrial area because it is located on the border with Sukoharjo Regency and Wonogiri Regency, Central Java. By looking at these conditions, the development of the economy, industry, trade, and education has the potential to grow rapidly. There are 58 elementary schools (SD and MI) in Semin District, including MI Muhammadiyah Blembem Candirejo (Figure 1). This school is in Blembem Hamlet, Candirejo Village, Kapanewon Semin, Gunungkidul Regency, or at Latitude - 7.8321481 and longitude 110.76489 (Google Map, 2023).

Soil conditions in the Candirejo area are silt type which is a transitional type between loam and fine sand. This

soil has the property that if it is exposed to water, it does not agglomerate so it is relatively easy for landslides to occur (Aminatun and Faizah, 2015).



Fig. 1. MIM Blembem in Candirejo, Semin, Gunungkidul.

Currently, the landslide occurred in Blembem Candirejo Village, on November 19, 2022, and result in death. After the landslide incident, one of the facilities in the form of a classroom 2 collapsed on the roof, on Thursday morning, November 17, 2022. This incident occurred while learning activities were in progress. The condition of the collapsed roof is shown in Figure 2 (Hidayah, 2022).

The cause of the collapse of the classroom is believed to be the weathered wooden frame. Prior to the incident, repairs to the school building had been carried out through the assistance of affirmation funds, but due to limited funds, only the eastern part of the school was repaired, namely the part of the wall that was already slanted. This condition was told by the principal as a partner in this activity, during the first visit of the community service team in December 2022.



Fig. 2. The condition of the roof damage in the MIM Blembem classroom after the landslide

In addition, after the collapse of the classroom roof, the students and their parents were traumatized. Currently, the student's parents have not allowed their children to enter the classroom, so learning activities are carried out in the foyer of the mosque which is in front of the school location. Based on field observations conducted by the team, it was noted that many rooms were still safe for teaching and learning activities, and only needed minor repairs. Therefore, students need a good understanding of the threat of disasters at school locations and the preparedness they must have so they are not traumatized. This service community activity is one of the solutions to overcome existing problems by providing disaster education, especially for students so they are not afraid to enter class with good knowledge and awareness. The purpose of disaster education is to provide students with an understanding

of disaster through workshops and games. After participating in this disaster workshop, students are expected to know the condition of the school and the existing disaster threats and have good preparedness if a disaster does occur in the future (Faizah, Diana, Hartono, and Aristyasari, 2019)

METHOD

The activity was held on Saturday, March 4, 2023, at the MI Muhammadiyah Blembem school location. Community service activities are carried out using an interesting workshop method, followed by games, and learning videos. In this activity, there are several stages such as filling out the pretest questionnaire, workshops, games and video playback, completion of the post-test questionnaire, and closing.

Improving preparedness is focused on increasing students' knowledge about local disaster threats, as well as self-rescue guidelines in the event of a disaster, especially if the disaster occurs during school hours (Hidayat, Widayatun, Hartana, Triyono, and Kusumawati, 2011).

The form of this community activity is lectures and simulations about self-rescue when there is a disaster. Topics that will be presented in this activity include:

- a) Participants' understanding of disasters and their impacts,
- b) Participants' awareness of the threat of disaster around the service location,
- c) Knowledge of participants about how to save themselves,
- d) Mental-spiritual strengthening of participants in facing disaster.

RESULT AND DISCUSSION

This activity was attended by 39 students from grades 3 and 4 (Figure 3). All participants were involved in lecturing, singing, and video screening activities, as shown in Figure 5 and 6. The activity was led by Dr. Ir. Restu Faizah, ST., MT., who serves as chairman of the Studies Centre of the Environmental, Disaster, and Geospatial (EDGs), Universitas Muhammadiyah Yogyakarta. The material from the workshop covered several things, namely knowledge about the condition of Indonesia's territory, tectonic plates and sources of disasters, disaster threats in Indonesia, things that must be done before, during, and after a disaster occurs, as well as disaster preparedness.



Fig. 3. The workshop participant



Fig. 4. The workshop by Dr. Ir. Restu Faizah, ST., MT.



Fig. 5. Singing activity



Fig. 6. Handling videos activity

Before and after the activity, participants were asked to fill out pretest and posttest questionnaires (Amri, 2001). The results of completing the pretest and posttest questionnaires showed that students' understanding of all types of knowledge in question increased by 10% to 80%, as shown in Table 1. The highest increase was shown by students' understanding of the number of volcanoes in Indonesia, namely 127 volcanoes. Understanding of plate tectonics also increased by 60%, while understanding of the ring of fire, plate tectonic movements, and earthquake predictions increased by 55%. In addition, the understanding of preparedness increased by 10%. From this result, it is evident that the methods of handling videos and singing are very effective in disaster workshop activities, especially for elementary school students.

Table 1. Result of Pretest and Posttest quosionaire

No.	Knowledge	Increasing of undertanding
1.	The location of Indonesia between 2 continents and 2 oceans	45%
2.	plate tectonic	60%
3.	the number of volcanoes in Indonesia	80%
4.	Ring of fire	55%
5.	Disasters that occur due to the movement of tectonic plates	55%
6.	Unpredictable of earthquake	55%
7.	The location of the school is in an earthquake-prone area	45%
8.	Something to be prepared if the disaster occurs	10%
9.	Something must do if an earthquake occurs	10%
10.	Something must be avoided if an earthquake occurs	15%

At the end of the activity, a question-and-answer game was given, and students who could answer were given prizes. The activity was also attended by MI Muhammadiyah Blembem teachers. The school would like to thank you for organizing this service activity. Before leaving, the service team took a photo with students and teachers, as shown in Figure 7 and 8.



Fig. 7. The UMY Civil Engineering Service Team and the MI teacher



Fig. 8. Service team and workshop participants

CONCLUSIONS

After this service activity was carried out, several conclusions were obtained as follows:

1. Disaster education can increase students' understanding of disasters.
2. How to learn by singing and playing videos is very effective for explaining knowledge about disasters.
3. MI Muhammadiyah Blembem students benefit from service activities, in the form of an increased understanding of disasters and preparedness.

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