

Towards A Resilient Society Through Social Studies Intergredied Disaster Mitigation Education in Basic School Students

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ABSTRAK

Abstract: In developing countries, educating all segments of society about the threat of disaster is not always possible due to a lack of expertise and educational materials. Consequently, one of the best ways to disseminate disaster risk awareness programs is to integrate this initiative into children's activities through education. Important information for a large part of the population can be conveyed through the knowledge, skills and enthusiastic motivation of the children. The purpose of this study is to provide an educational picture to the wider community about the importance of disaster mitigation education which is internalized through education, especially social studies learning for elementary school children. Children as assets and future leaders, can learn to protect themselves and their environment in the future through a global mitigation culture to increase the safety of themselves, their families and their communities as they grow up. Children are seen as a 'powerful force' in behavior change for the next generation to deal with emergencies when they occur and bounce back from the effects of disasters.

Abstrak: Di negara berkembang, mendidik semua lapisan masyarakat tentang ancaman bencana tidak selalu mungkin karena kurangnya keahlian dan materi pendidikan. Oleh karena itu, salah satu cara terbaik untuk menyebarkan program kesadaran risiko bencana adalah dengan mengintegrasikan inisiatif ini ke dalam kegiatan anak-anak melalui pendidikan. Informasi penting bagi sebagian besar penduduk dapat disampaikan melalui pengetahuan, keterampilan dan motivasi yang antusias dari anak-anak. Tujuan dari penelitian ini adalah untuk memberikan gambaran pendidikan kepada masyarakat luas tentang pentingnya pendidikan mitigasi bencana yang diinternalisasikan melalui pendidikan khususnya pembelajaran IPS bagi anak sekolah dasar. Anak-anak sebagai aset dan pemimpin masa depan, dapat belajar untuk melindungi diri mereka sendiri dan lingkungan mereka di masa depan melalui budaya mitigasi global untuk meningkatkan keselamatan diri mereka sendiri, keluarga mereka dan komunitas mereka saat mereka tumbuh dewasa. Anak-anak dipandang sebagai 'kekuatan besar' dalam perubahan perilaku bagi generasi berikutnya untuk menghadapi keadaan darurat ketika terjadi dan bangkit kembali dari dampak bencana.

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Indonesia is a country that has an area that is very rich in natural resources. However, behind the wealth of natural resources, there is also potential for natural movements that can cause disasters. Indonesia is one of the countries that is often hit by disasters, both natural and non-natural disasters. With more than 17,000 islands and a coastline of more than 80,000 km, it is the largest number of islands and the longest coastline in the world. Biodiversity ranks third after Brazil and Colombia. In addition, Indonesia is also the location of the most active volcanoes in the world and is a meeting of tectonic plates in the world that has the potential to cause volcanic eruptions, earthquakes and tsunamis. In such a position, Indonesia is a region with the title of passing through a fire belt or ring of fire. Of these predicates in the last ten years marked by the earthquake and tsunami disaster in Aceh (2004), the Yogyakarta earthquake (2006), Tasikmalaya (2009), West Sumatra (2010), the Mentawai earthquake and tsunami (2010), the Wassior landslide in West Papua (2010) and the eruption of Mount Merapi in Yogyakarta (2010) which claimed hundreds of lives and hundreds of trillions of rupiah in economic value. The eruption of Mount Merapi that never subsides, further reinforcing the title of the Republic

of Indonesia as a country of fire belt (Permatasari, et al., 2013). The Indonesian people must also be aware that they live in an area that is at risk from the threat of disaster. With these conditions, the community should be tough in facing every disaster. Past experience has shown that a lack of preparedness can lead to many problems during and after a disaster. Lack of understanding by the community and parents about disaster mitigation knowledge has an impact on their children's ignorance of the meaning of disaster mitigation. Disaster mitigation is a series of efforts to reduce disasters. This effort is to reduce the impact of disasters, whether natural, man-made or a combination of the two. The community only realized after a disaster, which caused many victims of property, property and lives. Realizing the risk of disasters occurring, it is important to develop awareness and culture of disaster reduction (DRR) (Shiwaku & Shaw, 2008).

Even the international disaster agency, namely the International Strategy for Disaster Reduction (ISDR), has the main objective of reducing risks and making all communities resistant to the effects of natural, technological and environmental hazards. This strategy also aims to proceed from safeguard measures to risk management through the integration of preventive measures into sustainable development (ISDR, 2003)(Wu et al., 2020). The goal for all communities to be resilient to the divergent effects of harm was announced in the Interagency Task for Disaster Reduction in April 2014 in Geneva. There is a need to change the approach from disaster recovery to disaster reduction and to 'focus on human security, community education and training with the aim of enhancing community disaster preparedness. This need is getting more and more attention today (Khan, 2008).

Education can be said to be one of the best media to prepare people for disasters. Unfortunately, in most developing countries educating all walks of life for disaster preparedness is a challenge due to a lack of skills and educational materials (Mubarak et al., 2019). Therefore, one of the best ways to disseminate awareness programs is the integration of awareness initiatives into children's education programs. Based on data, more than 30% of the population in Indonesia is under 18 years of age, so it is possible to disseminate important information about disasters and preparedness to most levels of society through children (Izadkhah & Hosseini, 2005). Children are good messengers in transferring this knowledge to their families. Fortunately, it has been observed that in many cases, the parental acceptance rates of their generally highly educated children are more likely to view education as an investment vehicle in educating the younger generation. It is necessary to have efforts to instill disaster education and disaster mitigation as early as possible, this is to provide knowledge and knowledge of potential disasters in the region. Schools can be an alternative to early recognition related to disasters, students can be introduced to the types of disasters and their mitigation, the introduction of disaster mitigation is carried out at the primary school level (Chen et al., 2012). The activities carried out are the introduction of disasters from an early age, starting from before the disaster occurs to post-disaster.

Disaster mitigation is one of the central principles of a comprehensive disaster management program. It is clear that the goal of disaster reduction and mitigation is the development of a safety culture. Meanwhile, as key elements in mitigation policies in disaster-prone countries, public awareness and education play an important role. In this case (Izadkhah & Hosseini, 2005) formulated a model in the form of a concentric ring with a clockwise moving sequence shown in Figure 1. The disaster mitigation circle model narrows the ring to identify areas to public awareness and ultimately leads to education as a core elements for raising public awareness. This circle model focuses on educating children with the aim of transferring knowledge from them to their families. It also shows the relationship between all the rings in the model and relationship of disaster mitigation to public awareness.

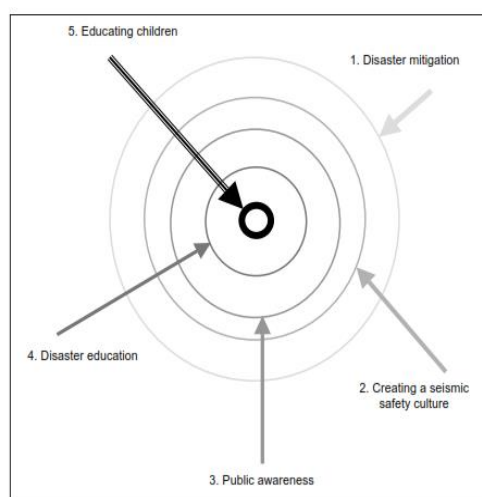


Figure 1. The Disaster Mitigation Circle Mode

Knowledge, understanding and behavioral skills in preventing, correcting, and anticipating disasters can be effectively transformed and socialized through social learning that specifically addresses problem issues. The teaching of social studies is very important for the primary and secondary education levels because students who come to school come from different environments. Their acquaintance with the society in which they are members is colored by their environment (Mulilis et al., 2000).

In accordance with the level of development, elementary students have not been able to fully understand the breadth and depth of social problems, but they can be introduced to these problems. Through teaching social studies students can gain knowledge, skills, attitudes, and sensitivity to face life with its challenges. Furthermore, it is hoped that one day they will be able to act rationally in solving the problems at hand. According to (Ohnishi, 2013) the purpose of social studies education is to foster students to become good citizens, who have knowledge, skills, and social care that are useful for themselves as well as for society and the country. Based on these descriptions, through social teaching, the introduction of disaster mitigation is easier to apply to elementary school students.

At this time, what students in elementary schools really need to understand is education about disasters. Elementary school students are the students who most quickly capture and transfer the knowledge gained from school to families and communities. Disaster education is an effort to increase students' knowledge about disasters starting from the disaster itself, the types of disaster events, signs of a disaster, the impact of disasters and disaster mitigation efforts. In this case, it is necessary to insert material on disaster mitigation in certain subjects. Disaster mitigation education taught in elementary schools is integrated into several subjects which are able to shape the attitude of students who are prepared to be prepared for any disasters that occur. This disaster preparedness attitude will be formed if students have provisions in terms of disaster mitigation knowledge and skills that can be implanted in the school environment. Therefore, education for disaster mitigation from an early age for elementary school students is a first step towards building a disaster-responsive and aware society.

METHOD

This research is categorized as a literature study, including for the data collection method implemented by reviewing literature. The data obtained related to disaster mitigation education were compiled, analyzed, and concluded so as to get conclusions about the literature study.

RESULT AND DISCUSSION

The importance of developing effective and sustainable public awareness programs became clear during the international decade of the International Decade for Natural Disaster Reduction (IDNR) for natural disaster reduction initiatives that included practical ways for individuals and communities to protect themselves from disaster risks. Public awareness is a broad process that includes public education, simulation exercises, and life-saving plans. Public goals through awareness programs are achieved by exchanging specific information through various media that illustrates ways to ensure personal and community safety for all who are 'at risk' (Takeuchi et al., 2011). The word 'exchange' means that information needs to be conveyed throughout the system, from the community to policy makers as well as down from the disaster community to the community. Disaster preparedness and hazard reduction initiatives can be introduced to communities to minimize long-term social and economic disruption from the impact of hazards. General awareness development policies and their relation to disaster mitigation are presented in Figure 2 (Bernhardsdottir et al., 2016). A further consideration is what information are specifically needed by different groups of people at risk. For example, a seven-year-old child may face the same threats as his grandfather, but each requires completely different messages to suit different perceptions and everyday circumstances. Furthermore, differences within social groups require different channels of information or material.

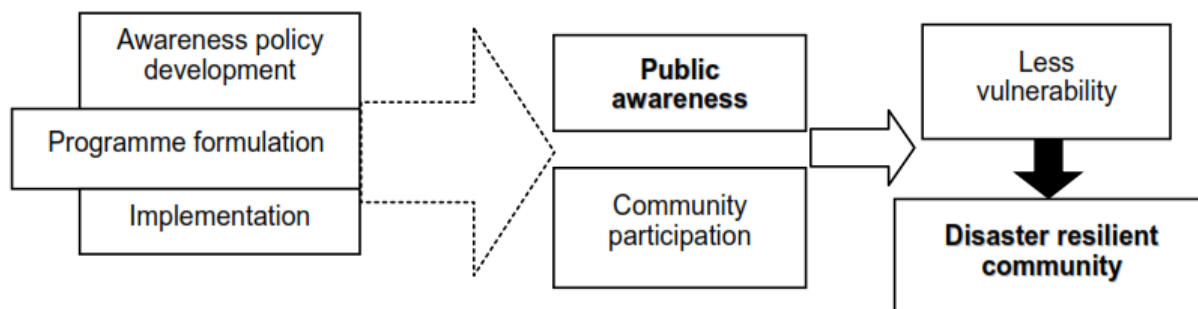


Figure 2. The Link Between Public Awareness Policies and Disaster Reduction

In many countries it has been proven that education is one of the best media to make people ready for disasters. In other words, one of the best ways to get awareness programs publicized is to integrate these initiatives into children's programs at the preschool and school levels. Various aspects and materials on health, safety and hazards have been incorporated more or less into the formal school curriculum. The aim of all these initiatives is to increase children's knowledge and understanding of risks, to teach preparedness and also to demonstrate how to react in times of disaster (Hendry, 2012).

Today schools and especially children play an important role in developing a culture of prevention. Young people, especially the current generation, learn easily. They can act as a good channel for transferring ideas to their families. Children should be encouraged and motivated even by their teachers to actively direct and participate in engaging them in making the world a safer place to live in. The theme of the 2000 UN World Disaster Reduction Campaign is 'Disaster Reduction, Education and Youth' which aims at the continuation and development of a culture of prevention through education so that young people can play a pro-active role in understanding risks and reducing the impact of disasters. Children are believed to be more receptive to new ideas than adults. As a result, many existing disaster mitigation and preparedness programs try to incorporate disaster-related topics into school curricula (Lu et al., 2020).

During the IDNDR, strategies to support disaster education in schools were developed. Its purpose is to provide guidance to children on disaster preparedness and mitigation. The strategy also aims to increase public awareness and knowledge about disasters and risk reduction. The challenge is shifting to a culture of mitigation through the school system. Therefore it requires awareness and intervention from the government to seriously develop strategies that support disaster education in schools. The aim is to include information that may be used by children as the next generation to equip them as future leaders in raising public awareness. This will indirectly contribute to making the community more resilient to the disasters that will occur. It is also believed that schools can be used to spread knowledge as well as provide a link between those who wish to reduce the impact of harm. Therefore, it is proposed that disaster education plans be included in textbooks at the elementary, middle and high school levels in many parts of the world, both in developed and developing countries such as Indonesia. The insertion of disaster mitigation material for elementary school aged children can be integrated with social studies learning.

Social studies is an integrated study material which is a simplification, adaptation, selection, and modification organized from the concepts and skills of History, Geography, Sociology, Anthropology, and Economics (Journell, 2011). Social studies subject matter is the use of concepts from social science that are integrated in certain themes. (Passe, 2006) explains that social studies aims to help develop a good self-concept, how to become part of a global and multicultural society, the process of economic, political and social socialization, build knowledge about the past and present as a basis for decision making, build problem-solving skills. Social studies describe the interaction of individuals or groups in society in both the physical environment and the social environment. Interaction between individuals within the scope of the environment starts from the smallest, for example family, neighbors, neighborhood or community, village/sub-district, district, district, province, country and the world. The characteristics of the objectives of social studies according to Bruce Joyce (McCutcheon, 1981) have three categories, namely (1) humanitarian education; (2) citizenship education; (3) intellectual education.

Humanitarian education means that social studies must help children understand their experiences and find meaning or meaning in their lives. This first objective contains elements of value education. Citizenship education means that students must be prepared to participate effectively in the dynamics of community life. Students have the awareness to improve their achievements as a form of responsibility for citizens who are loyal to the state. Value education in this objective is more emphasized on citizenship. Intellectual education means that children need to get analytical ideas and tools to solve problems developed from social science concepts (Zhao & Hoge, 2005).

Various programs and activities have also been designed and used in various parts of the world to educate children about disasters as shown in Figure 3 (Izadkhah & Hosseini, 2005). All of these educational initiatives have the same goal: first to motivate children and their families to take action to be better prepared to survive disasters, property loss, and psychological problems, and second to teach students about science. Currently, educational materials such as painting books, comic strips, story books and crossword puzzles are being developed for a wider spectrum of children and adolescents. It has also been demonstrated that effective public awareness programs, especially through children, can develop 'informed and independent' communities capable of taking appropriate protective measures.

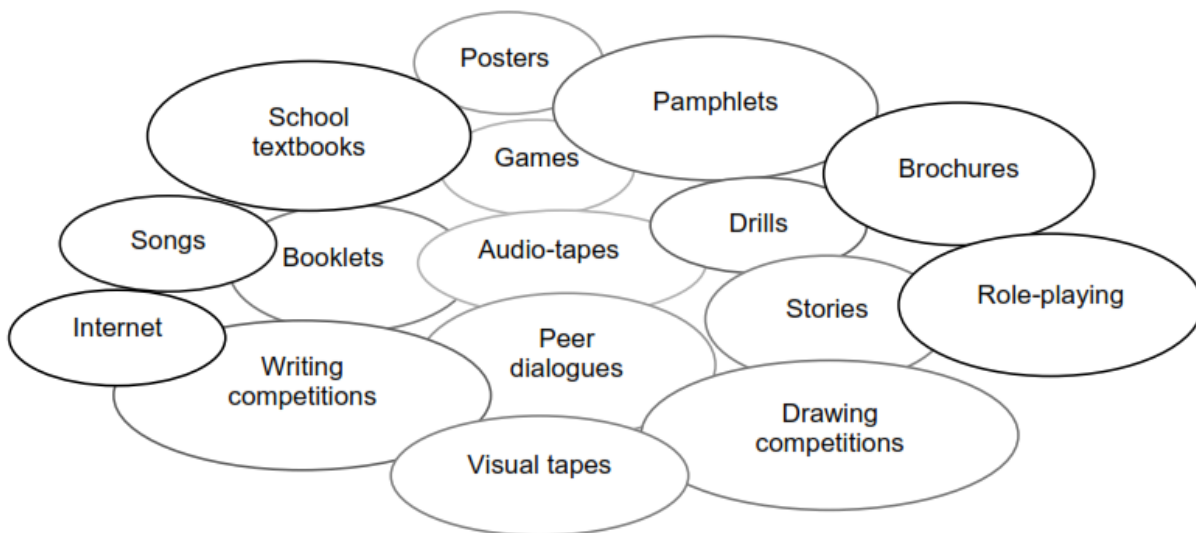


Figure 3. Media Sources, Educational Facilities for Disaster Mitigation in Social Studies Learning

Children are one of the groups most vulnerable to being affected by disasters (Chou et al., 2015). The vulnerability of children to disasters is triggered by a limited understanding of the risks around them, which results in a lack of preparedness in facing disasters. Based on data on disaster events in several areas, many victims due to disasters are school-age children, both during school hours and outside school hours. This shows that the importance of knowledge about disasters and disaster risk reduction from an early age to provide understanding and direction of steps that must be taken when a threat occurs around it to reduce disaster risk (Shiwaku & Shaw, 2008). Losses to school elements, such as teachers and students, the learning process, property, and provision due to disasters have put the future of millions of young people at risk (Honesti & Djali, 2012). In line with the agreement stipulated by the Hyogo Framework for Action in 2005, disaster risk reduction priorities need to be implemented in the education sector. If this continues, it will be difficult to create a generation and school that is disaster resilient if children do not have good preparedness for disasters.

According to (Chen et al., 2012), elementary school (SD) students are in their middle childhood. Students in middle childhood have a psychologically vulnerable condition and have the possibility to experience stress due to a disaster (Izadkhan & Hosseini, 2005). Disaster education must start early. This is based on the fact that every year it is estimated that around 66 million children worldwide are affected by disasters (Kurniawan, et al., 2017). To reduce the risk of a disaster occurring, increasing understanding through knowledge has an important urgency. One way to increase awareness is to change one's knowledge of something (Herdwiyanti & Sudaryono, 2012). If children's knowledge of disasters is classified as good, it can create a generation that is resilient to disasters and has good disaster preparedness.

CONCLUSION

It is assumed that educating the general public through children in their early stages of education is another nonstructural mitigation approach that is increasingly being used in disaster mitigation strategies with positive and promising results. Children, as assets and future leaders, can learn to protect themselves and their environment in the future through a culture of global mitigation. This can increase the safety of themselves, their families and their communities as they grow up. Children are considered a 'strong force' in behavior change for the next generation.

Public education programs must be an ongoing process that can design long-term low-profile campaigns through general education, and as an integral part of the school curriculum. Regular assessments of educational programs should be carried out. There are only a limited number of cases which have been fully studied. However, a number of studies and evaluations that are now initiated should further shed light on this issue. In addition, the potential problems mentioned above must be identified and considered, if effective awareness raising and appropriate information dissemination to all levels of society are to be achieved.

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