

The Importance of Improving Collaboration Skill in Confront an Earthquake with Mitigation Learning: A Content Analysis

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ABSTRACT

Collaboration skill is the most important skill in the 21st century for academic success and career of the learner. The implementation of collaboration skills in the school can be done by dividing tasks fairly, motivating group members to be responsible for their duties, and using to their socialize well. Increasing collaboration skills is becoming more important in its application in earthquake disaster mitigation, especially in earthquake-prone areas. The educator can apply the collaborative skill in science learning especially mitigation earthquake. The aspect analyzed is group collaboration, mutual respect, and respect between groups, both in the expression of opinions or decision making. Research uses the literature review in previous research journal. The aims to offer a view that the importance of improving collaborative skill is used and appeared in mitigation earthquake learning. The results is the collaboration skills emerge fully, and the goals of collaboration can be achieved. Disaster mitigation provides experience and knowledge for students to be able to develop personal skills, especially collaboration.

Keywords: Collaboration skill, Earthquake, Mitigation

1. INTRODUCTION

Indonesia is one of the countries prone to the natural disaster. Some of the areas like Java, Sumatra, Sulawesi, East Nusa Tenggara, and West Nusa Tenggara passed by the pacific ring fire and three tectonic plates. Especially in Daerah Istimewa Yogyakarta (DIY) have a high potential disaster because of it, like an eruption of Mount Merapi and earthquake. Yogyakarta also has the potential for a volcanic earthquake because of the active Mount Merapi. Quoted from republika.co.id, May, 27th 2006 in Yogyakarta, on that day around 05.53 or 05.55 WIB, an earthquake measuring 5.9 on the Richter scale shook one of the special provinces in the central part of Java, Indonesia. The shaking immediately destroyed buildings, infrastructure, electricity, and telecommunication networks throughout Yogyakarta. BNPB implies an earthquake is a vibration or shock that occurs by collisions between the earth's plates, active faults, volcanic

activity, or collapsed building. Quoted from sains.kompas.com, along 2019, Indonesia has earthquake activity as much as 11.573 times in any magnitudes and deepness. Significant earthquake activity was dominated by a magnitude above M5.0 which occurred 344 times. Earthquake is a vibration or shock that happens and is felt on the surface of the earth that comes from within the earth, due to the sudden discharge of seismic wave energy caused by tectonic plate movements happen in the earth's crust. With areas that have a large potential for adverse effects from an earthquake, people need knowledge about disaster mitigation, including actions and attitudes before, during, and after an earthquake occurs. This is supported by good and appropriate mitigation knowledge. Disasters mitigation is an effort aimed at reducing the impact of disasters, whether natural disasters, human-made disasters, or a combination of the two in a country or society [1].

The education sector is one of the ways to learn about earthquake disaster mitigation. Education is one of the effective tools of reducing disaster risk by including natural disaster subjects as a compulsory.

lesson for every student at all levels especially in the school located in disaster risk areas [1]. In the education process nowadays tend to ignore the element of educating and education seemed to be replaced by an activity that emphasizes the practice aspect of doing the task. Learning in the class is characterized by competition between the student and not meaningful learning. Learning should lead the student to live in harmony with others, respect each other, not argue, cooperate, take responsibility, are willing to sacrifice, and respect other people when they talk. The ways that are able to drive a meaningful learning process are through collaborative learning. Good collaboration can be built from a group of independent people who have the awareness that they will not be able to live without synergy. This means that collaboration can happen when there are two or more people working together to achieve the goals together [6].

In this paper, we will describe the importance of improving collaboration skills that lead to group collaboration, mutual respect, and respect between groups, both in the expression of opinions or decision making. Which is applied to earthquake disaster mitigation learning. The benefits for research activities is scientific development and educators can develop and apply collaborative skills in science learning, especially of mitigation disaster.

2. A REVIEW THE IMPORTANCE OF IMPROVING COLLABORATION SKILLS IN CONFRONT AN EARTHQUAKE WITH MITIGATION LEARNING

This section presents a review the importance skills in mitigation earthquake learning.

2.1. Collaborative Skills

Reading, writing and counting now a days is not the skill have to owned by the students. By the time, these skills have developed. In the industrial revolution, 4.0 skills development is creativity, critical thinking skills, communication skill, and collaboration skill [2]. Collaborative skills are 21st-century skills that are essential to the academic success and career of learners [3]. Educators today realized that learning which considers the student as being smart, critical, and creative also being able to

work together in solving problems in everyday life is important because the learning process is more on learning about things rather than learning how to be. Collaboration skills are very important in-class activities because they can increase students' knowledge in achieving learning goals [4]. This collaborative learning environment challenges students to express and defend their position, also brings on their own ideas based on reflection [5]. Collaborative learning is oriented towards students whose cognitive levels are low so that it affects other students [6]. The application of collaboration skills in the school can be done by dividing tasks fairly, motivating group members to be responsible for their duties, and using to socialize well [2].

Collaboration skills are becoming more important and needed by students in community life because all behaviors and circumstances indicate collaboration and cooperation between society [7]. For example, in minimizing more victims of earthquake disasters, the government, BNPB, LSM, and the community collaborate in socializing mitigation earthquake disasters in various earthquake-prone areas. When an earthquake occurs, the community is able to work together to rebuild and help each other who needed it. Goes along with the definition of collaboration which is a form of cooperation, interaction, compromise of several elements related to both individuals, institutions, or parties who involved, directly and indirectly, receive the consequences and benefits [8].

Collaboration skills have criteria for cooperation capabilities, namely: 1) providing information among group members, 2) being able to resolve disputes that happen, 3) creating a friendly atmosphere of cooperation, 4) exchanging ideas and opinions with group members, 5) supporting group decisions, 6) appreciate any suggestions and proficiency of other members, 7) participate in carrying out the tasks, 8) appreciate the results of group work [9]. The advantages of learning the ultimate goal of collaborating, namely: training effective division of labor; increase the attitude of responsibility; combining information from various sources of knowledge, experience, perspectives; increase creativity and quality of decisions stimulated by the ideas of each group member [10], [11]. Good collaboration can be built from a group of independent people who have the awareness that they will not be able to live without synergy. This means that collaboration can happen when there are two or more people working together to achieve the goals together [6].

The conclusion of collaboration skills is skills in the form of cooperation, the interaction between two or more people, compromise in some parts related to individuals, groups, institutions, and indirectly related to receiving the consequences and benefits of collaboration.

2.2. Learning Of Earthquake Disaster Mitigation

Today's natural disaster have become a sustainable development issue; the results of development were designed and built for a long time can be damaged and destroyed only by natural disaster that happen. Some of the potential disasters in Indonesia include earthquakes, tsunamis, floods, volcanic eruptions, landslides, windstorms, forest, and land fires [12]. A natural disaster is an excessive natural occurrence that can disrupt the normal activities of human life.

Disaster happens quite often are earthquakes of small and large scale. Earthquake is a vibration or shock that happens and is felt on the surface of the earth that comes from within the earth, due to the sudden discharge of seismic wave energy caused by tectonic plate movements happen in the earth's crust. The earthquake can happen due to vibrations of volcanic activity, namely the contact of magma with volcanic walls and high gas pressure during intense explosions. The earthquake can cause impacts likes: fault or fracture; vibration or shock; landslide; fire; change in drainage, change in groundwater; and the tsunami. One of the consequences caused is human life. Children are very vulnerable to earthquake, this is triggered by factors around them, so they are not ready when a disaster strikes [13]. Therefore, it is necessary to learn disaster mitigation from an early age. The implementation of disaster mitigation education is instilled in the community as early as possible and through formal school education since elementary school, so it can minimize the number of casualties who are still classified as children [13]. Learning to anticipate disaster risk or mitigation learning also needs to be applied up to university [14].

Disasters mitigation is an effort aimed at reducing the impact of disasters, whether natural disasters, human-made disasters, or a combination of the two in a country or society [1]. Mitigation practices can be grouped into structural and non-structural mitigation. Structural mitigation is related to physical construction efforts, while non-structural is related to land use planning, development regulations, and

education to prepare people who are accustomed to living together with disasters [15].

From this explanation, it can be concluded that earthquake disaster mitigation learning is a way also an effort to reduce the impact of an earthquake disaster is applied to educational units, especially in classroom learning, from elementary school to college to familiarize students with earthquake disasters.

2.3. The Importance Of Improving Collaboration Skills In Confront An Earthquake With Mitigation Learning.

After it has been explained above that collaboration skills take the form of cooperation, the interaction between two or more people, compromise in several parts relating to individuals, groups, institutions, and other parties that are directly and indirectly related to receiving the consequences and benefits of collaboration. Good collaboration can be built from a group of people who have the awareness that they will not be able to live without synergy. This means that collaboration can happen when there are two or more people working together to achieve the goals [6]. The final objectives of collaborating are training effective division of labor; increase the attitude of responsibility; combining information from various sources of knowledge, experience, perspectives; increased creativity, and quality of decisions stimulated by the ideas of each group member [10],[11]. Increasing collaboration skills is becoming more important in its application in earthquake disaster mitigation, especially in earthquake-prone areas.

Earthquake disaster mitigation learning is a method and effort to reduce the impact of an earthquake disaster that is applied to educational units, especially in classroom learning, from elementary school to university to familiarize students with earthquake disasters. In mitigation, it is necessary to carry out a series of actions, consisting of actions before a disaster happens, during a disaster, and after a disaster or post-disaster. This activity is provided in classroom learning in the form of socialization and simulation. [16].

In earthquake disaster mitigation learning activities, collaboration skills can be raised when students work together to simulate a series of mitigation actions properly and correctly. Tell each other and share their experiences and knowledge with their classmates about earthquakes and their

mitigation. Have responsibility for decisions and actions to mitigate earthquake disasters.

3. CONCLUSION

Collaboration skills become important by involving earthquake disaster mitigation learning. Activities in earthquake disaster mitigation can assist educators in structuring lessons in the class. So the collaboration skills emerge fully, and the goals of collaboration can be achieved. Disaster mitigation provides experience and knowledge for students to be able to develop personal skills, especially collaboration.

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