

# Projection of Bosai Culture in Natural Disasters: The Case of the Turkish Republic of North Cyprus

Merve UYSAL<sup>1</sup>, Süheyla ÜÇİŞİK ERBİLEN<sup>2</sup>

<sup>1</sup>Assist. Prof. Dr., Final International University, English Language Teaching, TRNC,

<sup>2</sup>Assoc. Prof. Dr., Eastern Mediterranean University, Turkish and Social Sciences Education, TRNC,

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## ABSTRACT

Since the existence of the world, several destructive disasters have been experienced that have shaped the earth and threatened the existence of mankind in this world. Events such as landslides, floods, earthquakes, avalanches, wars, industrial accidents and epidemics, which occur almost on a daily basis in different geographies, have caused a very high number of casualties and property losses. These destructive events are classified into two according to their sources, namely natural and human disasters. Natural disasters began to take place long before man existed on the planet and they will probably continue until the end of the world. Each natural disaster affects the lives of societies and people from physical, sociological and economic aspects. Disasters such as earthquakes, floods, hurricanes, storms, forest fires, volcanic eruptions and landslides are of natural origin and they cause loss of life or property. In addition, people also experience psychological and sociological devastation. Millions of people lost their lives and billions of dollars of economic losses occurred due to disasters in the last century. Therefore, the development level of countries plays a critical role in terms of their preparedness for disasters and their relationship with resilience. Earthquake is a natural disaster of high importance in terms of the area it affects and the destruction it causes. As in every sector of the countries exposed to earthquakes, deep wounds can be inflicted in their education system. Since living with an earthquake brings with it several problems and phenomena, the issue of education stands out as a concept that countries should take precautions and study. For example, its ability to adapt to and make investments in innovations, to pay attention to pre-disaster education, and to learn from past mistakes has raised Japan to the level of the country with the highest disaster preparedness in the world. At this point, with the correct methods it applies and the precautions it takes, Japan sets a good example for a country with a high earthquake risk, such as the Turkish Republic of Northern Cyprus. Therefore, using a literature review, this paper focuses on the extent to which the reality of earthquakes is included in the secondary school geography curriculum of public schools in TRNC, which is located in the first-degree earthquake zone. According to the findings, Social Studies and Geography textbooks were examined at all levels, and only 6th grade Social Studies and 9th grade Geography textbooks found information about earthquakes. However, it has been observed that this information needs to be more extensive on earthquake preparation, earthquake time, and what to do after the earthquake, and no application is included. As a result, earthquake is a natural phenomenon, which is turned into disaster due to lack of education and knowledge. From this perspective, in order to prevent economic and human capital losses, the country's population must be prepared at all levels of education for the steps to take before, during and after the earthquake.

**Keywords:** Earthquake, Geography Course Curriculum, Social Studies Course Curriculum, Japan, Turkish Republic of Northern Cyprus, Bosai Culture

## INTRODUCTION

Natural disaster is the general name given to events that cause loss of life and property in a short time, which cannot be prevented and sometimes cannot be foreseen. The potential impact of a natural disaster is a function of the population density where it occurs. Natural disasters are divided into two groups as meteorological and geological. Earthquakes, volcanoes, landslides and tsunamis are geological disasters that originate from the earth's crust or from its further depths. Meteorological disasters are of atmospheric origin, examples of which are natural events such as floods, droughts, erosions, storms and typhoons. The places where the plates forming the earth's crust rub against each other, go above or under one another and compress each other are known as the earthquake zones of the earth. Instant movements due to friction occur at the places where the plates come into contact with each other, and the results of this movement create fractures called "faults" that affect an area that can extend to several kilometers on the earth; in some cases, they are visible to the naked eye. The emerging energy can turn this natural event into a disaster, depending on the width of the area it affects and the density of the population.

Some areas of the earth are much more dynamic than others in terms of natural disasters. In particular, three large areas, the zone called the Ring of Fire in the Pacific Ocean, the St Andreas fault passing through the middle of the Atlantic Ocean, and the areas containing the Alpine-Himalayan belt, are in constant motion in terms of seismicity. Japan is an archipelago of 6852 islands in the Pacific Ocean, located in the eastern Sea of Japan, the East China Sea, China, Korea and Russia. The country stretches from the Sea of Okhotsk in the north to the East China Sea and Chinese Taipei in the southwest. The archipelago's four main islands, Honshu, Hokkaido, Kyushu, and Shikoku, constitute together approximately 97% of Japan's territory (OECD, 2018). The special topography and geographical location of Japan's islands in the North Pacific Ocean make them highly prone to various disasters. Located along the Pacific Ring of Fire, the country is highly susceptible to volcanic eruptions, earthquakes and aquatic disasters. There are many inactive and active volcanoes near densely populated areas, and approximately 1,500 seismic events are witnessed each year. Additionally, the Japanese archipelago is a place where extreme weather conditions, such as wet season cloudbursts and typhoons, occur frequently and heavy falls of snow are witnessed in winter. As a result, Japan is among the countries that experience natural disasters most frequently in the world. The average population density in Japan is one of the highest in the world, with 336 people per square kilometer. Approximately half of this population lives at places of relatively soft volcanic soil and low terrain, which is close to coastlines. As a result, large numbers of people are highly defenseless against storms, landslides, earthquakes and tsunamis. The last two types of disasters occur frequently and lead to significant injuries and loss of life. They can also cause damage to property and infrastructure. Sometimes these events can lead to tragically high casualties: in 1896, more than 20,000 people were killed due to the tsunami caused by the Sanriku Earthquake. The Kanto earthquake, which hit Tokyo in 1923, killed more than 100,000 people. In 1995, a 6.8 magnitude earthquake claimed nearly 6,000 people in Kobe and Hyogo Prefectures. These are examples of the most tragic natural disasters in the country (Capdevila, Maas, & Zimmermann, 2014).

The Great Eastern Japan Earthquake, centered in the Tohoku region, occurred on March 11, 2011 and caused serious damage. In March 2015, amidst the reconstruction following the disaster, the Third United Nations World Conference on Disaster Risk Reduction was held in Sendai. At the end of the conference, the 'Sendai Framework for Disaster Risk Reduction 2015-2030' was adopted. Subsequently, a group that carried out the organizing work of the Sendai Conference considered declaring the Tohoku region of Sendai as a pilot area that would work continuously to reduce disaster risk. In this context, it was decided to

organize the “World Bosai Forum/International Disaster Risk Conference” (hereinafter referred to as WBF) in Sendai starting from 2017. WBF is an international conference of citizens held in Sendai, Japan, in partnership with Switzerland’s International Conference on Disaster Risk. The first WBF Committee was held with the participation of various interested parties from industries, governments, academia and media (Tohoku University, Sendai City, Miyagi Prefecture, Kahoku Shimpo Publishing Inc., Tohoku Economic Federation, Global Risk Forum GRF Davos and Sendai Chamber of Commerce and Industry). WBF aims to share the findings and lessons of the Great Eastern Japan Earthquake in Japan and overseas, and to enable participants to generate new disaster risk reduction solutions that could be useful around the world. It also planned to promote the Sendai Disaster Risk Reduction Framework 2015-2030, an international disaster risk reduction policy, and to popularize the Japanese term and concept of ‘Bosai’ on a global scale (Chubachi, Ono, Ito, & Imamura, 2018, p.1234).

In addition, in an effort to minimize the problems that arise as a result of being a mountainous island country, having limited arable land and natural resources, and being susceptible to heavy guerrilla rains, floods and earthquakes, Japan has always given utmost importance to education for the development of the country. The country has integrated its bitter experiences in dealing with disasters into its education system with a unique culture of prevention known as ‘Bosai Culture’. The word “Bosai” is formed by the combination of two Japanese words. The first one, “Bo”, has several meanings, such as protection, prevention, mitigation, rehabilitation or reconstruction. The second word “sai” can be translated into English as “disaster”. Characteristics such as preparedness for disasters, struggling to survive, learning from bitter experiences and passing on the knowledge gained to future generations as an intangible heritage have been among the defining elements of Japanese culture since ancient times. Especially when the illiterate members of the society survived after disasters, they told their grandchildren how they managed it. Therefore, the new generation has been culturally prepared for disaster. Bosai involves a holistic approach to reducing the adverse consequences of disasters. Elements such as intervention, recovery, harm reduction and most importantly prevention, are integrated and in this way, a unique ‘prevention culture’, called ‘Bosai culture’, has emerged in the country including technical measures, requirements, laws, confronting disasters and learning lessons, and a strong citizenship awareness, which is a role model for the whole world (Pastrana-Huguet, Casado-Claro, & Gavari-Starkie, 2022).

Reduction of disaster risks has an essential place in Japan’s struggle with disasters. For this reason, from kindergarten to high school, students at all schooling levels receive regular education on risk management (Yazıcı, 2023). Japan was heavily damaged by World War II and lost most of the opportunities it had for the development of the country. Despite this, the country recovered very quickly, with the trained qualified manpower and a qualified education system that would enable the country’s development (Abe, 1998). The Ministry of Education, Culture, Sports, Science and Technology (MEXT), which is responsible for Japan’s education system, has hardly changed its education policies since World War II which is based on the 6+3+3+2/4 system. Particularly the case of Kamaishi has proven the importance of risk education to reduce the impact of disasters. Despite the loss of 1,000 lives in this coastal city during the disaster in 2011, all 3,000 students were evacuated to higher ground and none of them lost their lives. Proper decisions taken during the disaster and actions calculated to fit the conditions saved the lives of students. This event, known today as the ‘Miracle of Kamaishi’, is not an extraordinary case, but rather points out the vital importance of regular drills, emergency evacuations, first aid techniques and other practical skills included in the school curriculum. The education system in Japan makes students acquire skills through practice so that they can act proactively in the case of an emergency. In other words, in struggle with disasters, the need for active learning and developing social skills comes to the fore, rather than memorizing and repeating drills. Due to the country’s aging population and the interdisciplinary nature of Disaster Risk Management, schools have been identified as the center of social well-being. The shortest route to the goal of reaching students and creating a risk culture among them goes through the education system. Therefore, young people as agents of change will be able to transfer the knowledge they have acquired to the people they live with at home

(Yazıcı, 2023).

Learning lessons is one of the main actions taken by the Japanese against natural disasters they may encounter in the future. The 'Kobe Earthquake Memorial Museum' was established in the city of Kobe as a reminder of the suffering brought upon by the Great Hanshin Earthquake of 1995, which claimed 6000 lives and demolished tens of thousands of buildings. The museum also provides disaster prevention and survival training. On the other hand, every September 1, one hundred thousand people who died in the 1923 Great Kanto Earthquake are commemorated. Seminars, drills and exhibitions are held in most parts of the country within the framework of 'Bosai no hi', or 'Disaster Prevention Day'. September 1, Disaster Prevention Day, is considered a very important opportunity to raise awareness and acquire disaster survival skills. Disaster prevention activities have become an important part of Japanese daily life. In many neighborhoods, there are disaster prevention organizations (jishu bosai soshiki) composed of volunteers. All stakeholders of society, such as youth, elderly, NGOs and businesses, are involved in disaster prevention processes. Earthquake survival kits, radios, masks, flashlights and food stocks are among the most important materials at home. In addition, there are places where earthquakes can be experienced with the help of simulators. Families go here together and experience earthquake with the help of a simulator. In addition, applications that give 5-10 seconds forewarning of an approaching tsunami or earthquake can be downloaded to all smartphones. Japan also has a highly developed railway network. All trains in the high-speed train network called 'Shinkansen' are equipped with earthquake sensors. During the 9.0 magnitude Tohoku earthquake in 2011, 27 trains that were in motion on this line stopped immediately and no loss of life or property was suffered in these trains (Yazıcı, 2023).

Located in Eastern Mediterranean, Cyprus (9251 km<sup>2</sup>) is the third largest island of Mediterranean after Sicily (25710 km<sup>2</sup>) and Sardinia (24090 km<sup>2</sup>). Cyprus is neighbor with Türkiye (70 km) to the north, Egypt (400 km) to the south, Syria (110 km) to the east, Palestine and Lebanon (200 m) to the southeast, and is approximately 400 km away from Crete and Rhodes islands to the west. The landforms of the island, which is a piece of land that has been the scene of settlement since the early periods of humanity, are the continuation of the Amanos (Nur) mountains and Kel Mountain in the south of Türkiye and the Lower Asi River runnel between them. The continuation of Amanos is represented by the Beşparmak (Girne) mountains, the extension of the Lower Asi river runnel is embodied by the Mesarya pit area, and the Kel mountain in the south continues as the Karlı mountain (Troδος) in Cyprus (Alagöz, 1959). Cyprus Island is geo-morphologically divided into three main units. In the north of the island, there are the Beşparmak or Kyrenia Mountains, which are 150 km long and 15 km wide, extending parallel to the Anatolian coast, and in the west Troδος (Karlı) Mountain is located, which has a mass, solid shape, between İskele and Larnaca in the south and the Albanian cape. The Mesarya Plain, which extends along the Gulf of Güzelyurt and the Gulf of Famagusta, separating these two mountainous masses, has a length of 85 km and a width of 35-70 km. It is a hollow area that is narrow in the middle and wider on both sides (Kutoğlu, 2010: 25). In terms of tectonics, the mountains of the Island of Cyprus which twined and rose above the water in the Miocene age, were previously connected to the land, but were separated as a result of subsequent subsidence. The subsided pit area between two mountain ranges was invaded by the Pliocene sea, and then it rose above the sea and took its current status at the beginning of the Miocene age (Alagöz, 1959).

Cyprus is located on the Alpine-Himalayan earthquake zone where almost 15% of the world's earthquakes take place. Several earthquakes have occurred throughout history in the line called the Cyprus arc, located in the west and south of Cyprus. When we adapt the Mercalli scale to earthquakes between 26 BC and 1900 AD, it can be seen that 16 earthquakes with a magnitude of 8 occurred in the island. The city of Paphos in 15 BC, Paphos, Salamis and Kition in 76 AD, and Paphos and Salamis repeatedly in 332 and 342 were completely destroyed by earthquakes (Akgün, 2016). Of the more than 400 earthquakes that occurred between 1896 and 2004, the ones that caused the most damage were experienced in 1941, 1953, 1995, 1996 and 1999. As a result, it is known that Northern Cyprus is highly active in terms of earthquakes, and



especially the coastal part of Famagusta is the riskiest region at present.

Therefore, it is imperative to prepare to minimize the effects and damages of possible future earthquakes in Northern Cyprus, which is located in a seismically active area. These preparations should first be made available to students through education, and for this purpose, this subject should be given extensive coverage in textbooks. Only then can earthquake preparations be generalized throughout the society at large. Books, one of the main educational tools, still maintain their importance despite developing technological opportunities (Özkan, 2010). In order to prepare students for life and raise them as beneficial individuals for society, books are the preferred teaching media to meet the requirements of the curriculum used by both students and teachers in the most cost-effective way.

In textbooks, topics related to preparedness should be discussed under three main headings: before the earthquake, during the earthquake and after the earthquake. Prior to the earthquake, the building stock in potential earthquake zones should be examined and public buildings, residences and schools that are not resistant to earthquakes should be demolished and replaced with earthquake-proof ones. Items inside buildings that may topple over during an earthquake should be fixed in place. Emergency exit doors of buildings should not be locked, and the routes leading to these exits should not be blocked. The risks during an earthquake can be minimized with these preparations made in advance. During an earthquake, the people exposed to the tremors should not move too much, and by taking a few steps they should be able to reach a place where a life triangle can be formed. They should not rush to stairs and balconies. If they are in a vehicle, the car should be pulled over and they should wait inside with the windows closed. When it is clear that the tremors are over, gas and electricity connections should be cut off to avoid potential fires and get out to an open area. People trapped under debris should pay attention to preserve their strength by avoiding too much movement. They should try to show that they are there by hitting somewhere if they can (AFAD, 2018; Selçuk & Erem, 2022).

In addition to the foregoing, as living with an earthquake brings with it many problems and phenomena, education stands out as a strategic issue that countries should take precautions and work on. For example, Japan has earned a well-deserved reputation as the country best prepared for disasters in the world today, thanks to its ability to adapt to innovation, invest, prioritize pre-disaster education, and learn from past mistakes. At this point, with the accurate methods it applies and the precautions it takes, Japan sets a good example for countries with a high earthquake risk, such as the Turkish Republic of Northern Cyprus. Therefore, in this study, literature review will be carried out to determine the extent to which the reality of earthquakes is included in the Social Studies and Geography course curricula at the secondary education level of public schools in TRNC, which is located in the first-degree earthquake zone.

## METHOD

This study, which was conducted with the qualitative research method, preferred the document review design. Document review consists of collecting and systematically analyzing written and visual sources containing information about the phenomena intended to be analyzed (Wach & Ward, 2013). This technique is a data collection tool used to collect, systematically examine and evaluate records. These analyzes are based on collecting information about the main subject of the study by examining all data available. This technique was used in this study because it was believed that examining the Social Studies and Geography textbooks used in secondary education and studies on the subject would better serve the purpose of the research. In the findings and comments section of the paper, a separate title was given for each textbook analyzed and the earthquake topic covered in the content of the relevant book was examined. In the study, the Social Studies and Geography textbooks used in the secondary education level shown in Table 1 in the 2023–2024 academic year were examined as documents.

**Table 1.** Information about the books examined in the study

Grade	Publisher	Publication year
6. Grade	Ministry of National Education	2023
7. Grade	Ministry of National Education	2023
8. Grade	Ministry of National Education	2023
9. Grade	Semih Ofset	2021

During the research process, the textbooks used in the relevant courses in the determined academic year were examined based on the question ‘How and at what level are earthquake-related preparations included in the Social Studies and Geography textbooks used in secondary education in public schools in the 2023-2024 academic year?’. In this context, among the books examined, information about the earthquake was found only in the 6th-grade Social Studies and 9th-grade Cyprus Geography books.

The sections directly or indirectly related to the earthquake topic in the selected books were analyzed and the sentences and activities that are considered to serve the purpose of the study were grouped based on the earthquake preparedness stages. In the grouping, three main headings were determined, namely preparations before the earthquake, what to do during the earthquake, and what to do after the earthquake. In addition to these headings, earthquake-related visuals and activities have also been added to the grouping. The examined data were evaluated from the perspective of earthquake preparedness and presented with descriptive content analysis. The purpose of such analyzes is to bring together similar data around certain concepts and themes and organize these data so that the readers can comprehend and interpret them (Yıldırım & Şimsek, 2005).

## FINDINGS AND INTERPRETATIONS

Under this heading, the findings on the topic of earthquakes in the 6<sup>th</sup> and 9<sup>th</sup> grade Social Studies and Geography textbooks are presented using tables. First, the findings regarding the 5<sup>th</sup> Grade Social Studies textbook are given in Table 2.

**Table 2.** Findings about the topic of earthquakes in the 6<sup>th</sup> Grade Social Studies textbook

Grade	Publisher	What to do before earthquake	What to do during earthquake	What to do after earthquake	Visuals about earthquakes	Activities related to earthquakes
6	Ministry of National Education	✓	✓	✓	✓	✓

The themes in which earthquakes are discussed in the 6<sup>th</sup> grade Social Studies textbook are as follows: Understanding Social Events; Geography and People, Population and Settlement; Human in Time; Social and Cultural Life; Democracy and Our Country. The topic of earthquakes was not mentioned in other themes. Earthquakes were not mentioned in themes other than the ‘Geography and Human’ theme. In the ‘Geography and Human’ theme, all-natural disasters, including earthquakes, were mentioned in the sub-theme titled ‘Natural Disasters and Their Effects’. Visuals containing 9 different natural disasters were given and 3 questions were asked in order to measure the readiness of the students. They were asked to write the following in the spaces provided: in the first question, which natural events they witnessed; in the second question, which of these natural disasters they experienced in their environment, and in the third

question, what the effects of natural disasters were on social life (p.43).

In addition, things to be done before an earthquake are explained in a colored box. It is recommended that the connections between the walls, floor and roof of the house should be reinforced, furniture such as bookshelves and cabinets inside the house should be fixed to the wall to prevent them from falling over during the earthquake, and food, water and similar materials that will last for a few days in the event of a possible earthquake should be stored in a separate place. You should wait with your head between your arms and avoid heading towards elevators or stairs. Electricity and gas must be cut off from the power unit, and if you are outside during the earthquake, you are advised to stay away from tall buildings and bridges. Things to be done after the earthquake are explained in another box. If you are injured, you should wait without panicking, check whether there are flammable chemical materials nearby, and avoid driving into traffic and worsening the congestion. It is also recommended not to use phones unnecessarily and to stay away from electrical wires (p.45).

On the mentioned page, an image (Image 1) shows the disaster and emergency kit.



**Image 1**

When image 1 is examined, it can be seen that there is no information about the content of the disaster kit. Explaining the content of an emergency kit in detail would have been beneficial in terms of ensuring students' learning and retention. Secondly, the findings regarding the 9<sup>th</sup> grade Geography textbook are given in Table 3.

**Table 3.** Findings as regards the topic of earthquake in the 9<sup>th</sup> grade geography textbook

Grade	Publisher	What to do before earthquake	What to do during earthquake	What to do after earthquake	Visuals about earthquakes	Activities related to earthquakes
9	Ministry of National Education	X	X	X	✓	X

The following themes are included in the 9<sup>th</sup> grade Geography textbook in that order: General Characteristics of Cyprus; Physical Characteristics of Cyprus; Climate of Cyprus; Natural Flora of Cyprus;

Underground and Surface Waters in Cyprus; Population Characteristics in Cyprus; Agriculture in Cyprus; Industry in Cyprus; Trade in Cyprus; Transportation in Cyprus, Tourism in Cyprus. Earthquakes were not discussed in themes other than the theme 'Physical Characteristics of Cyprus'. The subject of earthquakes is covered under the title 'Earthquakes in Cyprus' on the 24<sup>th</sup> and 25<sup>th</sup> pages of the 9<sup>th</sup> grade Geography of Cyprus book. Here, the definition of an earthquake, its nature, and devastating earthquakes in the history of Cyprus are explained, and it is clarified that there are 7 stations measuring earthquakes in the country. Eventually, no information is given about the fact that an earthquake is a physical event, how a person should prepare before an earthquake, and what to do during and after an earthquake.

There are 3 images about the earthquakes on the mentioned pages in the 9<sup>th</sup> grade textbook.

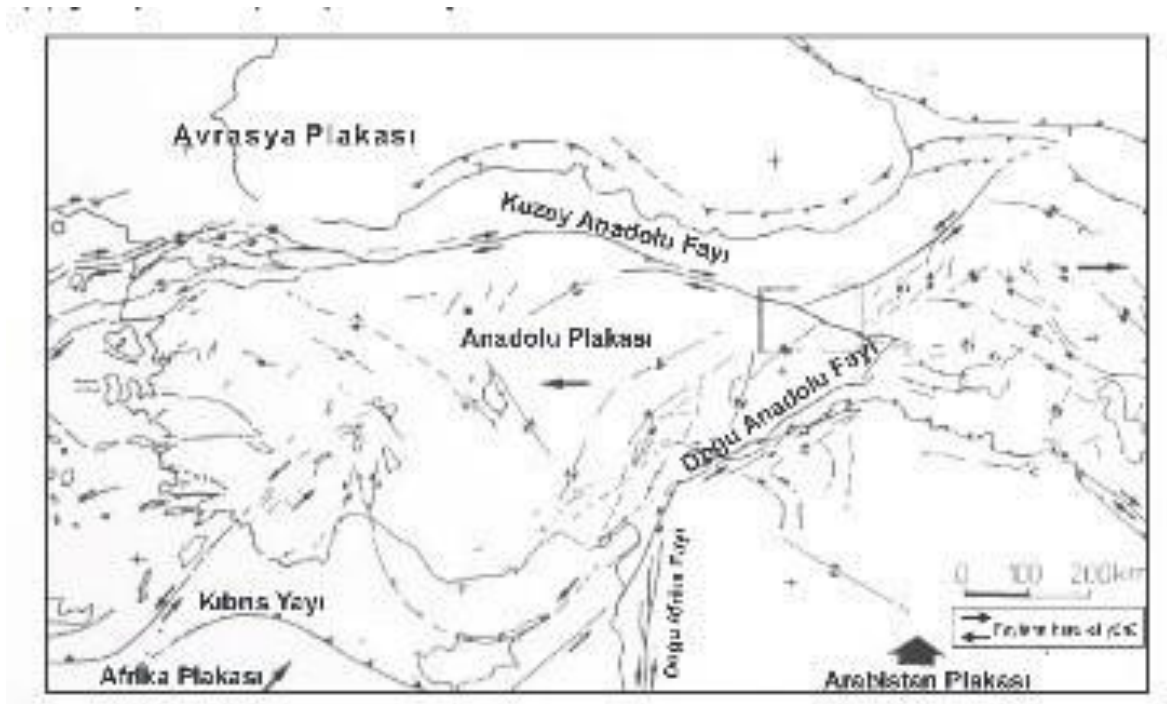


Image 2



Image 3





**Image 4**

Image 2 shows a map of the earthquake zones affecting Türkiye and Cyprus. The third image is the visual of the seismograph, which is used to continuously record tremors and determine their size, duration, epicenter, and time. The fourth image depicts a building heavily damaged by an earthquake.

A research assignment in the form of a student activity is also given on the same page. Here, the question “What are the ways to protect against earthquakes?” is asked, and the students are demanded to write down their research findings in the provided space. Thus, learning ways to protect against earthquakes is given to the students as a research assignment. Therefore, it can be argued that the Cyprus Geography 9<sup>th</sup> grade book does not cover earthquake readiness at all, as well as what to do during and after an earthquake.

## **DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

Natural disasters affect places and people in many ways. Some of these are short-term effects, while others are long-term. As technology advances, efforts continue to help individuals survive disasters with minimal damage. Some of these activities are related to the preparations to be made before a disaster, some are related to the things to be done during a disaster, and some are related to the things to be done after the disaster situation is eliminated. In light of the foregoing, preventing natural events from turning into disasters or educating individuals from an early age about what to do in case of a natural disaster will definitely help reduce loss of life and property. On September 1, 1923, after the great Kanto earthquake in Japan, disaster preparedness training was given at every level of education, from kindergartens to universities, during the week that coincides with this date so that people could protect themselves from disasters. All students are required to participate in evacuation training during this week. In the drills, students learn evacuation routes and walk them; kindergarten children participate in this activity with their teachers, and universities work with secondary schools to measure the time needed for evacuation with GPS and determine the best route for the following year. The motto in Japan is help myself to help myself to help someone else. These individual preparations start by buying suitable backpacks that contain necessities on the stock exchange. Children, in particular, play an essential role in preparing families and communities for natural disasters. Practicing what they have learned can keep themselves and their families safe. In addition, schools use simulators to train children and parents to simulate a major earthquake; every child knows the

phrase ‘push, run, talk and come back’.

It is possible to raise awareness through textbooks, which are one of the most popular instruments of education. In line with this information, Social Studies and Geography textbooks used in all grades were examined in this study. As a result of this analysis, information about the earthquake could be identified only in the 6<sup>th</sup> grade Social Studies and 9<sup>th</sup> grade Geography textbooks. It has also been observed that this information is quite limited in terms of earthquake preparation and what to do during and after an earthquake, let alone lacking application. Considering that practice is more important than theory in natural disaster education (Musacchico, 2016), the lack of practical instructions on what to do in case of an earthquake in the textbooks in Northern Cyprus can be considered a serious deficiency. In Mızrak’s (2018) study, it was found out that disaster education enriched with different practices increases the level of awareness and resilience. Therefore, it is emphasized that disaster education should target gaining skills rather than merely memorizing knowledge (Kadioğlu 2005).

In addition, unfortunately, 35 citizens of Northern Cyprus lost their lives in the Kahramanmaraş-centered earthquakes in Turkey on February 6, 2023. Students aged between 10 and 14, their coaches, and their families, who were there for the volleyball matches, were killed under the debris of a hotel. The ‘Bosai Culture’, that is, the understanding of preparing for and preventing future disasters by learning from past sufferings, developed by the Japanese, should definitely be established in Northern Cyprus. The abstract legacy obtained from these sufferings should be the subject of an intangible cultural transfer to current and future generations, not just as pain but as a lesson to be learned. Precautions should be taken in the development plans, structures and existing building stock taking the earthquake factor into consideration.

Although people naturally want to forget painful events, earthquakes and other disasters are a reality for Japan and Cyprus. Therefore, it is inevitable to produce concrete solutions that will enable people to cope with these disasters. In conclusion, as a result of the study, it was determined that textbooks were insufficient in raising awareness about natural disasters in general and earthquakes in particular in Northern Cyprus. People are naturally scared by things about which they have no knowledge (Karabulut and Bekler, 2019). This is especially true for children. In this context, textbooks should explain in detail to students that Cyprus is located on an important earthquake zone and that they should be consciously prepared without fear. For this purpose, the following recommendations are made:

- It would be appropriate to give the possibility of an earthquake in Northern Cyprus in accordance with the age of the students in the textbooks to be prepared.
- Earthquake-related practices and social activities can be included in Social Studies and Geography textbooks to raise earthquake awareness and consciousness among students.
- Books or video recordings of publicly known academics who are experts in the field of earthquake studies can be used in course activities.
- In Japan, disaster culture and disaster awareness are processes that begin at the pre-school education level. Therefore, it would be appropriate to analyze this country well, and to add a course titled “Disaster Geography” in the school curricula in Northern Cyprus.

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