



Sendai Arahama Elementary School, designated as a Disaster Ruin. (Provided by Tomoki Tateishi; CC BY-SA 4.0)

Teacher's manual for

Learning about life and living through a Disaster Ruin

Disaster Ruin: Arahama Elementary School

Disaster Risk Reduction— Develop Individual Efforts into Community Initiatives



Inside the school building before it was designated as a Disaster Ruin. The blackboard is filled with messages written by visitors and graduates. (Provided by the Center for Remembering 3.11; Sendai Mediatheque)



Arahama School District Citizens' Grand Sports Day held in September 2015 on the premises of Shichigo Elementary School, which Arahama Elementary School was consolidated with at the end of March 2016. (Provided by Miyagi University of Education)

Eight years have passed since the Great East Japan Earthquake of March 11, 2011. Children born after the disaster have begun elementary school. To prevent such severe damage from being caused by massive earthquakes and tsunamis for years to come, we need to pass on our experiences with the disaster to the younger generations, and ensure that they are remembered in the future.

In line with that goal, Sendai Arahama Elementary School has been designated a Disaster Ruin, and refurbished as a public museum. It is housed in the damaged structure, and exhibits valuable materials associated with the disaster and affected regions. As visitors see the building and listen to a guide from the Arahama district, they can imagine how powerful and violent a tsunami can become. The museum provides a special out-of-school opportunity for students to learn about emergency preparedness.

Visitors will also view an exhibit that introduces the pre-disaster Arahama district, and can envision the past lives led in areas stretching along the beautiful coast. The exhibits have been designed to inspire awareness of the value of ordinary life, which requires the efforts and intentions of many people to protect and maintain. We hope they will help individual students think about how to act as a member of their class and school, and look for appropriate ways to engage in wider society.

We have created this booklet with these purposes in mind. We hope it will be used to refresh each person's understanding that many people work in various fields to protect and maintain ordinary life, particularly for children and communities. We also hope that it will inspire them to be aware of their responsibility as a member of the community and to take action to ensure that the community will work as one to pass on the relevant information to future generations. This publication is particularly directed at school education to provide a tool for various activities aimed at developing exploratory ways of seeing, thinking about, and taking a self-directing attitude toward life, quality and competence.

We sincerely hope that many children will learn a great deal about life and living through the memories of the disaster, which will facilitate their strong physical and mental development.

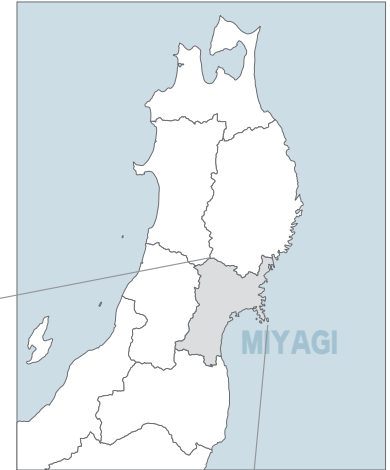


Miyagi University of Education

In cooperation with:  Sendai City

Disaster Ruin and Related Facilities

TOHOKU



Disaster Ruin Sendai Arahama Elementary School

The Arahama district is situated near the Pacific coast, about 10 kilometers east from the center of Sendai City. In the district, a community was built around the Teizanbori local historic canal which runs along the coastline. Its pre-disaster population was about 2,200 with 400 households.

Arahama Elementary School, originally established in 1873, is located 700 kilometers inland from the coast. When the Great East Japan Earthquake occurred, the school provided temporary shelter to a total of 320 evacuees, including all 91 students enrolled in the school at the time, the school staff and people from local neighborhoods. Giant tsunami waves reached the second level of the structure.



Top: Front view of Sendai Arahama Elementary School

Bottom: Overview of Arahama district before the disaster (2007)



Top: Subway Tozai Line Arai Station building housing the Memorial Community Center

Bottom: Inside of the Memorial Community Center

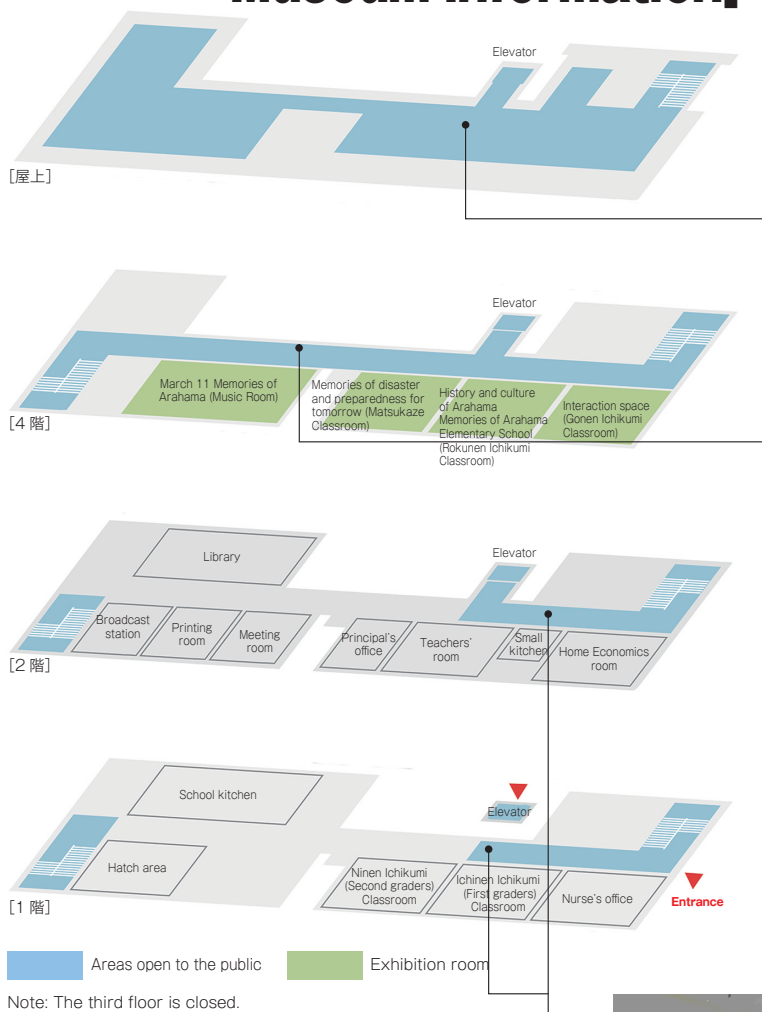
Sendai 3/11 Memorial Community Center

The Center was established as a disaster-related base in coastal areas in the eastern part of Sendai City. Its objective is to pass down memories and lessons related to disaster experiences, promoting social interactions and building future visions. The Center houses exhibition rooms, interaction spaces, studios, a rooftop garden and other facilities.

The Center organizes various programs aimed at drawing visitors to disaster-affected areas to promote future development. These include: a permanent exhibition, which presents chronologically organized records relating to the region's disaster situation and reconstruction process as well as its local history; "Our March 11" and "Coastal areas illustrated map," designed to encourage visitors to share their personal experiences and memories; and special exhibitions and events employing unique concepts and approaches to explore the subjects of disaster and community.

A combined tour around the Center and Arahama Elementary School is recommended for the purpose of gaining a deeper understanding about the Great East Japan Earthquake and interacting with various people and communities, an opportunity to learn about the essence of living life.

[Arahama Elementary School: Museum information]



[Exhibition]

Damaged structures and facilities of inside and outside of the building as well as photos of situations shortly after the disaster are on display. You can learn how violent and powerful the tsunami waves were as they hit the school.

Downloadable worksheets for each exhibition are available on our webpage (See page 8).

Rooftop: Past and present Arahama district (a set of five photos)

You can learn from the photos on display how the landscape of the Arahama district has changed due to the disaster, while standing on a spot with a commanding overview of the district, seeing the distance to the coast and Teizanbori and witnessing raised roads under construction.

Fourth floor (Exhibitions in former classrooms)

This section presents a detailed report of the sequence of events at Arahama Elementary School, from the first earthquake shock, evacuation, and tsunami flooding to the arrival of rescue services, while also providing guidance on disaster preparedness measures. The section also gives an introduction to the history and culture of the Arahama district as well as memories from the 140-year history of Arahama Elementary School.

· Music Room

Clock from the gymnasium indicating the time when the tsunami reached the location

· Matsukaze Classroom

Re-enactment of the lives of evacuees at Arahama Elementary School; Anti-tsunami measures developed by Sendai City; Disaster preparedness at Arahama Elementary School

· Rokunen Ichikumi (Sixth graders) Classroom

Miniature model of the pre-disaster Arahama district; Memories of Arahama Elementary School

· Gonen Ichikumi (Fifth graders) Classroom

Interaction space
Video screening to present the Arahama district before and after the disaster

First/second floors (Observation from the hallway, with a capacity for about 20 people on each floor)

First floor: Damaged facilities of the nurse's office and a classroom struck by the tsunami; Photography of the same spaces under rubble caused by the disaster

Second floor: Traces indicating the level that the tsunami waves reached (First floor sunk under water; 40 cm above the second floor); balcony walls partially collapsed by tsunami waves and traces of wave marks on the structure

Outside of the building

Exterior walls on the east side of the school building directly hit by the tsunami; former site of the gymnasium

[Screening]

Fourth floor: Music room (with a capacity for about 40 people)

· 27 hours at Arahama Elementary School, March 11 (about 17 minutes)

The video footage presents the situation in the tsunami-hit school over the 27 hours starting from the first earthquake shock recorded at 2:46 p.m. on March 11 to the moment the rescue of all evacuees trapped in the isolated building was completed. It includes interviews with school teachers, the head of the neighborhood association, and others who were involved, as well as video clips of the rescue helicopter in operation.



Video screening at former music room (March 11 Memories of Arahama)



Miniature model of pre-disaster Arahama district

The video will show viewers a different way of looking at the building, specifically the stairs up to the rooftop and the scenery from there.



Visitors on the first floor hallway



East side wall of school building(Shutterstock.com)

Optional programs/activities for visitors

- (1) Use worksheets to take notes while looking around the exhibitions and share them upon completing the tour
- (2) Hold a discussion after viewing the video, regarding changes of the Arahama district before and after the March 11 disaster (based on exhibitions) and the visitors' own regions and future actions in relation to the topic
- (3) Make a guided tour offered by staff from the Arahama district (Request in advance)

Utilizing a Disaster Ruin for Education



Rooftop of Arahama Elementary School, with a commanding overview of the Arahama district. This photo was taken in 2012 when IMF Managing Director and Chair Christine Lagarde visited the school. (REUTERS)

Plan 1

Create a disaster prevention leaflet

Course plan utilizing a Disaster Ruin: for upper grade students at elementary school and the Period for Integrated Studies (standard number of classes: 10)

	Learning activities	Number of classes	Evaluation criteria
Task setting	<ul style="list-style-type: none"> ○Brainstorm about natural disasters and damage caused ○Visit Arahama Elementary School to gain an overview of disaster situations related to the Great East Japan Earthquake <ul style="list-style-type: none"> · Understand the scale of earthquake disasters, increasing awareness of the importance of preparing for possible disasters ○Discuss issues related to disaster control faced by the regional community where students' live and grasp the overall task to pursue throughout the coursework <ul style="list-style-type: none"> · Discuss types and characteristics of disasters that are likely to hit the region, increasing motivation for learning for the purpose of protecting their own lives as well as the lives of those around them <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 10px 0;"> Create a disaster prevention leaflet for lower grade students and local residents </div> <ul style="list-style-type: none"> ○Assume likely natural disaster scenarios and plan tasks <ul style="list-style-type: none"> · Make a list of issues of particular interest individually and clarify the related reasons · Select issues and build a detailed research plan, with a focus on disaster prevention 	2	<ul style="list-style-type: none"> ◇Be aware of the importance of learning about disaster prevention and have high motivation for study Enthusiasm for learning, humanity, etc ◇Select learning tasks based on reasoning about interests in the selected tasks Knowledge and skills <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 10px 0;"> Teaching points <ul style="list-style-type: none"> · Give students an opportunity to learn not only about damage caused to Arahama Elementary School but also pre-disaster lives and current thoughts of residents in disaster-affected areas, looking to help them associate what they have learned with their actual life · Encourage students to actually feel the importance of working together to prepare for possible disasters to protect their own lives as well as the lives of people close to them and the community </div>
	Information gathering	<ul style="list-style-type: none"> ○Do research on causes of disasters and assume damage likely to be caused by the disasters ○Do research on disaster preparedness measures established at the students' school and home, and propose necessary action plans ○Do research on disaster preparedness measures established in their region, and propose necessary action plans <p>(Major subjects of research)</p> <ul style="list-style-type: none"> · Locations of emergency-related facilities · Cooperation systems for disaster preparedness, including partnerships with relevant bodies · Emergency drills organized by community associations and voluntary disaster prevention organizations · Establishment and management of regional emergency-related storage · Public awareness-raising activities for disaster prevention and preparedness 	2
Organization /analysis	<ul style="list-style-type: none"> ○Prepare a disaster prevention leaflet based on research results on selected issues 	3	<ul style="list-style-type: none"> ◇Organize research results effectively from the viewpoint of disaster prevention Abilities to think, make judgments, express oneself, etc.
Consolidation /output	<ul style="list-style-type: none"> ○Present findings and thoughts related to the details learned during the course to lower grade students, their families and local residents <ul style="list-style-type: none"> · Communicate to lower grade students, their families and local residents the need to increase awareness on the importance of preparing for possible disasters · Listen to presentations of other students taking different approaches, thereby expanding the awareness of disaster prevention ○Interact with others based on findings from the course. Review learning activities and consider possible actions to take individually to improve disaster prevention measures and community networking. 	3	<ul style="list-style-type: none"> ◇Effectively present a disaster prevention leaflet to communicate findings from the coursework to lower grade students, their families and local residents Abilities to think, make judgments, express oneself, etc. ◇Based on what has been learned, think about possible actions to take to improve disaster prevention measures and community networking, and prepare to take action Enthusiasm for learning, humanity, etc.

Plan 2

Disaster prevention education activities linked with school events

Full-year course plan for elementary and junior high school students to learn about disaster prevention in connection with school events. Created based on the concept of Plan 1.

Knowledge and skills	Abilities to think, make judgments, express oneself, etc.	Enthusiasm for learning, humanity, etc.
Be aware that Japan is prone to natural disasters regardless of region, understand mechanisms of the occurrence of disasters, study past events, and be able to act appropriately in the event of a disaster to avoid anticipated dangers and secure safety	Take past disasters seriously as related to ongoing issues to confront, figure out how to make judgments and act appropriately in the event of a disaster to secure safety and share ideas with others	Feel sympathy for disaster survivors, review disaster prevention measures established in the local community, and prepare to act voluntarily to help form a better society

Month	Activities utilizing a Disaster Ruin	Relationships with school events	
		Event	Details
4	<ul style="list-style-type: none"> ○ Learn about the Great East Japan Earthquake. · Look at the fact that the first major shock of the 2011 Tohoku Earthquake hit the region during school hours 	Security and emergency evacuation drills	<ul style="list-style-type: none"> · Review the school zone and consider responses to take in the event of emergency
5	<ul style="list-style-type: none"> · Learn about damage caused by the disaster by region and measures developed for the purpose of restoration, disaster prevention and reduction of disaster risks 	Out-of-school activities/self-study projects	<ul style="list-style-type: none"> · Do research on local emergency shelters and actions to take in the event of emergency as part of out-of-school activities and self-study projects
6・7	<ul style="list-style-type: none"> ○ Learn about Arahama Elementary School · Learn about damage caused to the Arahama district with the help of audiovisual materials · Look at the facts that the school is preserved as a Disaster Ruin <p>Teaching points</p> <ul style="list-style-type: none"> · Focusing on the aspect of Arahama Elementary School as a representative of "damage to a school" among many damaged structures, encourage students to imagine what they may have in common with the lost school life · Teach about disaster prevention in association with various aspects of school life, such as relationships with the local community and regular events 	Earthquake evacuation drill	<ul style="list-style-type: none"> · Examine appropriate actions to take in the event of an earthquake, based on past experience · Engage in the drill in a way that utilizes findings relating to responses taken at Arahama Elementary School in the event of the disaster
8・9		Swimming pool opening day	<ul style="list-style-type: none"> · Recognize the dual nature of water: benefits and threats (demonstrated by flooding and tsunamis) to human life, and figure out appropriate approach to water usage
10・11	<ul style="list-style-type: none"> ○ Visit a Disaster Ruin (Arahama Elementary School) and try to understand the feelings of disaster survivors in the Arahama district <p>Consider thoughts and wishes of local people who worked to preserve the school as a Disaster Ruin</p>	School district sports day	<ul style="list-style-type: none"> · Recognize school functions as part of the community and, accordingly, the importance of the school cooperating with the community to respond appropriately to possible emergencies
12	<ul style="list-style-type: none"> · Through field research at Arahama Elementary School, study about the situation on the day of the disaster and tsunami-induced damage as well as lives of local disaster survivors · Review the field research and share findings and questions 	Chorus competition	<ul style="list-style-type: none"> · Learn about episodes involving the piano at Arahama Elementary School and the story about music playing a key role in community formation as part of reconstruction initiatives. Then consider issues related to disaster prevention and community formation in the context of their own lives
1・2	<ul style="list-style-type: none"> ○ Based on past disaster situations and response activities, prioritize actions to take individually in the event of a disaster · Assume delayed recovery of damaged infrastructure for electricity, gas, water, information, transportation and other services, and explore necessary and possible actions to take individually 	Disaster prevention/safety map Creation	<ul style="list-style-type: none"> · Understand characteristics of the relevant region and issues in light of disaster prevention, and create a disaster prevention/safety map based on the understanding
3	<ul style="list-style-type: none"> ○ Understand about types and characteristics of disasters likely to occur in the local region and related issues, and figure out a way to incorporate necessary actions in future life · Figure out appropriate future lifestyles based on findings obtained from each subject · Explore approaches to participating in community activities as a community member and engaging in society as one of its members to shape its future 	Disaster prevention/safety map Presentation	<ul style="list-style-type: none"> · Study the completed map to identify issues, and explore approaches to using the information to contribute to the community as one of its members · Communicate information about hazardous locations in addition to disaster-related risks to local residents in an easy-to-understand manner, and make relevant proposals for future generations

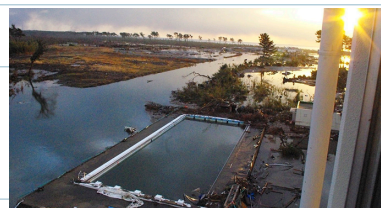
Utilizing a Disaster Ruin for Education

Plan 3

Annual teaching plan for interdisciplinary learning about disaster prevention

Based on Plan 2 linked with individual subjects, with teaching models offered

Month	Learning objective	Disaster prevention learning involved in each subject
4	Learn about living in Japan, a country prone to natural disasters	Technology: Technologies related to materials and processing —Roles of forests
5		Technology: Technologies related to information —Natural disaster and information communications Home Economics: Clothing, food and housing; Housing life —Preparing a housing space for disaster control
6		Science: Moving objects and their energy—Types of energy Social Studies: Regions in Japan—Preparedness for natural disasters
7		Social Studies: Regions in Japan—Natural environment in each region Social Studies: Our lives in contemporary society —Information-oriented society, declining birthrate and aging population Technology: Technologies related to energy conversion—Energy resources, energy conversion efficiency
8	Study ways of responding to and surviving a disaster	Home Economics: Family and home life—Interrelationships between home life and community life
9		Technology: Technologies related to energy conversion—Safe usage of electrical equipment Home Economics: Clothing, food and housing; Dietary life—Cooking practice for assumed emergency situations
10		Japanese Language: Traditional language and culture—Reading literature with a focus on historic backgrounds: natural disasters described in ancient writings (Sendai-edition supplementary reading materials for disaster prevention education) ...Teaching model 1
11		Science: Electrical current and its usage—Electrical current and magnetic fields Music: Musical expression activities reflecting sympathy for disaster survivors in Arahama and imagined thoughts and feelings of present users of the piano that was transferred from Arahama Elementary School ...Teaching model 2
12		Science: Electrical current and its usage—Electrical current and magnetic fields Health: Development of physical and mental functions and mental health—Stress control Health: Human health and the environment—Use of water in human life and drinking water; Disposal of household waste Health: Prevention of injuries—Prevention of and first aid for injuries caused by natural disasters
1	Identify issues facing the local community with respect to disaster response, and develop solutions.	Science: Geological activities—Volcanoes Social Studies: Skills for historical research—Research on the history of the local community Technology: Technologies related to energy conversion—Crafting tools and items useful in emergency situations English: Internationally communicate the lessons learned from experiences with disasters that have occurred in Japan (NEW HORIZON3 UNIT4) ...Teaching model 3
2		Science: Geological activities—Earthquake Science: Climate and its changes—Natural blessings and meteorological disasters Science: Nature and human beings—Regional natural disasters Social Studies: Regions in Japan—Field research in the local community Social Studies: Aiming at a better society—Discuss how to prepare for possible disasters as members of the community ...Teaching model 4
3		Science: Geological activities—Stratum formation, geological activities Science: Climate and its changes—Natural blessings and meteorological disasters Science: Science and technology for human beings—Energy supporting human lives Social Studies: Regions in Japan—Field research in the local community



Overview of the Arahama district from the Arahama Elementary School building the day after the area was struck by the tsunami. You can see the school swimming pool on the near side. (Provided by the Center for Remembering 3.11; Sendai Mediatheque)

Teaching point

Through linking with individual subjects, help students not only look at issues faced by disaster-hit Arahama Elementary School as their own, but also consider the issue of disaster prevention from a broader viewpoint, with a view to increasing their social awareness. Employing different subjects to approach the common themes surrounding Arahama in their specific ways, encourage students to sympathize with people in the district, and then commit themselves to contributing to the community and to network building by taking actions, rather than simply acquiring knowledge.



1st floor of the Arahama Elementary School that filled with tsunami debris on the day after the tsunami attack.(Provided by the Center for Remembering 3.11; Sendai Mediatheque).

Activities Utilizing a Disaster Ruin

- Learn about the Great East Japan Earthquake
 - Learn about the occurrence of the 2011 Tohoku Earthquake
 - Learn about damage caused by the disaster by region and measures developed for the purpose of restoration, disaster prevention and reduction of disaster risks

 - Learn about Arahama Elementary School
 - Learn about damage caused to the Arahama district with the help of audiovisual materials
 - Look at the facts that the school is preserved as a Disaster Ruin

 - Visit a Disaster Ruin (Arahama Elementary School) and try to understand the feelings of disaster survivors in the Arahama district
- Consider thoughts and wishes of local people who worked to preserve the school as a Disaster Ruin
- Through field research at Arahama Elementary School and the Arahama district, study about the situation on the day of the disaster and tsunami-induced damage as well as lives of local disaster survivors
 - Review the field research and share findings and questions

 - Based on past disaster situations and response activities, prioritize actions to take individually in the event of a disaster
 - Assume delayed recovery of damaged infrastructure for electricity, gas, water, information, transportation and other services, and explore necessary and possible actions to take individually
 - Understand about types and specifics of disasters likely to occur in the local region and related issues, and figure out a way to incorporate the necessary actions in future life
 - Figure out appropriate future lifestyles based on findings obtained from each subject
 - Explore approaches to participating in community activities as a community member and engaging in society as one of its members to shape its future

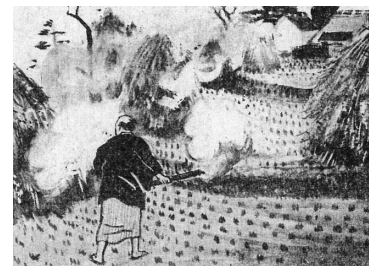
Note: For evaluation criteria, refer to the previous page

Teaching model 1: Japanese Language

From ancient times, Japan has been struck by a host of massive earthquakes and tsunamis. Some of those events were described in classical literature. This teaching plan centers on activities that will allow students to grasp people's understanding of, and attitudes toward, natural disasters in the times before modern science was developed, and to compare the ancient approach with that of the contemporary Japanese.

(Extract from the Sendai-edition supplementary reading materials for disaster prevention education)

Extract from *Hojoki*, written by Kamo no Chomei. The picture depicts houses collapsing and people and houses falling down during an earthquake (in the possession of Iwase Bunko, Nishio City).

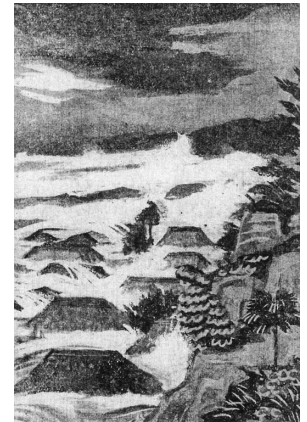


The article of *Inamura no Hi* (signal fire using paddy straw) appeared in Japan's elementary school Japanese Language course book, starting from 1937 and continuing to 1947.

Teaching model 1: Japanese Language

Another example of natural disasters described in classical literature

On November 5, 1854, when the Ansei Nankai Earthquake occurred, Goryo (Gihei) Hamaguchi, in the current Hirokawa Town of Wakayama Prefecture, made a signal fire using paddy straw to lead local residents to safer locations, successfully evacuating them from the expected tsunami (in the possession of Miyagi University of Education Library).



Teaching plan 2: Music

In school, pianos play an important role as a tool for students and teachers gathering and working together to play and create music on various occasions, thereby inspiring future development. The piano used in Arahama Elementary School was transferred to Shichigo Elementary School to serve that role in a new location. In the teaching plan, students first learn the background story of the transferred piano, and then engage in musical activities—listening, playing and creating—while imagining how the piano may have served people in the original place directly and indirectly.



Teaching plan 3: English

This teaching plan primarily centers on the objective of communicating internationally about Japan's propensity toward natural disasters (synchronic communication). It also includes activities to encourage students to become aware of the importance of passing down memories and lessons from disaster experiences to future generations (diachronic communication).

Teaching plan 4

In groups, students discuss what they can do to prepare for a possible disaster to smoothly cooperate with local residents in responding to an actual event. They also create posters to communicate their ideas resulting from the discussion. Then, the entire class shares the posters created by each group and selects works to be actually posted. Through this activity, students explore approaches to consensus building and social engagement.

Learning from a Disaster Ruin

What you can learn from the Disaster Ruin of Sendai Arahama Elementary School

What happened in Arahama on March 11, 2011
Arahama Elementary School's relationship with the local community

School life: Day-to-day education activities

Community life: Lives in a coastal town

Damage caused by the Great East Japan Earthquake; threats and impacts of a tsunami

This program is intended to communicate two important things: lessons learned from experiences with the disaster in order to protect life, and the memories of irreplaceable lives that were lost in the school and community. We hope this inheritance will inspire the learners to look at the issues faced by the school and community as their own, and promote profound learning.

Disaster Prevention—Develop Individual Efforts into Community Initiatives (web version)

<http://drr.miyakyo-u.ac.jp/arabama/>

Information and materials related to this booklet are available on the webpage above.

Access the page for up-to-date worksheets for visitors, details of teaching plans and other related data.

- Worksheets for visitors to the facilities
- Details of plans, teaching plans, practical reports, etc.
- Links related to Arahama Elementary School
- Records and archives related to the Great East Japan Earthquake
- Teaching materials for disaster prevention
- Other related information and materials

Scan the right QR code to access the webpage.



Information for Visitors

Disaster Ruin: Sendai Arahama Elementary School

https://www.city.sendai.jp/kankyo/shisetsu/ruin_arabama_elementaryschool.html

Address: 32-1 Aza-Shinborihata, Arahama, Wakabayashi-ku, Sendai-shi, Miyagi-ken 984-0033

Phone: +81-22-355-8517

Hours: 10:00 a.m. to 4:00 p.m. (Admission free)

Closed: Every Monday, every second and fourth Thursday (or the next day if falling on a public holiday) of each month, the day after a public holiday (excluding weekends and national holidays), and during year-end and New Year's holidays

Restroom: Available in the adjacent office (equipped with an accessible toilet)

Car parking: 77 passenger cars; two priority cars; and five large busses (no charge)

Sendai 3/11 Memorial Community Center (within the Subway Tozai Line Arai Station building)

<http://sendai311-memorial.jp/>

Address: 85-4 Aza-Kutsugata, Arai, Wakabayashi-ku, Sendai-shi, Miyagi-ken 984-0032

Phone: +81-22-390-9022

Hours: 10:00 a.m. to 5:00 p.m. (Admission free)

Closed: Every Monday (or the next day if falling on a public holiday), the day after a public holiday (excluding weekends and national holidays), and during year-end and New Year's holidays

Restrooms: Three locations (First and second floors, near the station), equipped with an accessible toilet

No parking space on the premises. Toll parking is available in the nearby neighborhoods.



Arahama Elementary School/Memorial Community Center Vicinity Map

Disaster Risk Reduction—Develop Individual Efforts into Community Initiatives Teacher's manual for learning about life and living through a Disaster Ruin

Planning and production: Disaster Ruin Utilization Support Project, Graduate School for Teacher Training, Miyagi University of Education
Yosuke Obayashi and Shutaro Takami (both from the 11th year class), Yutaro Nashimoto (Professor), Takashi Oda (Associate Professor)

Cooperation: Sendai City (Town Planning Policy Bureau; Board of Education)

Design cooperation: Chikara Kawamura

Note: This manual has been created based on studies conducted within Graduate School for Teacher Training Course "School Education/Teacher Training B (Regional Cooperation)."