



Iwate Prefectural Board of Education

Live Involve Prepare

For High School

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Iwate Reconstruction Education
Supplementary Reader

Iwate Prefectural Board of Education



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What Is the Iwate Reconstruction Education?

The project has been implemented in all schools in Iwate Prefecture since 2012, with the aim of fostering the three educational values, “live, engage and prepare”, which were derived from the experience of the Great East Japan Earthquake and tsunami, so that students can love their hometown and become part of those who support its recovery and development.

What does ‘Live, Engage, Prepare’ mean?

It identifies the educational values highlighted by the experience of the earthquake and tsunami and classifies them into three categories: life and mind, people and community, and disaster prevention and safety.

We believe that this is necessary for children and students to “pass on the lessons of the earthquake and tsunami to future generations, think about their own lives and ways of being, open up dreams and the future, and create a society.”

List of Three Educational Values and 21 Example Aims of the Program

Three Educational Values	21 Example Aims of the Program
1 Live <ul style="list-style-type: none"> ● Matters related to the importance of life, nature, and reverence ● Matters concerning one’s mental state and way of living in the future ● Matters related to mental support ● Matters related to physical health, including the maintenance and promotion of physical fitness 	① Irreplaceable Lives
	② Coexistence with Nature
	③ Importance of Self Value
	④ The Importance of Hopes and Dreams, and the Strength to Pursue Them
	⑤ Self-Growth
	⑥ Mental Health
	⑦ Physical Health

Three Educational Values	21 Example Aims of the Program
2 Involve <ul style="list-style-type: none"> ● Matters related to family ties and the joy of being part of a family ● Matters related to helping and taking care of friends and community members ● Matters related to the ties (bonds) within and outside of the prefecture and with other countries in post-disaster relief activities ● Matters related to community building ● Matters related to our connection with nature 	⑧ Family Ties
	⑨ Connection with Friends
	⑩ Connection with the Community
	⑪ Volunteer and Relief Activities
	⑫ Self and Community
	⑬ Progress of Restoration and Reconstruction
⑭ Community Development for Disaster Preparedness	

Three Educational Values	21 Example Aims of the Program
3 Prepare <ul style="list-style-type: none"> ● Matters related to disaster preparedness based on the experience of the earthquake and tsunami (e.g., disruption of information and lifelines), scientific knowledge, and disaster preparedness literacy ● Matters related to decisions made during a disaster ● Matters related to daily preparedness in anticipation of disasters ● Matters related to the ability to survive in times of emergency and the skills to secure food, clothing, and shelter ● Learning about disasters 	⑮ Damage from Natural Disasters
	⑯ Mechanisms of Natural Disasters
	⑰ History of Natural Disasters
	⑱ Impact of Disasters on Lifelines and Local Economies
	⑲ Gathering, Utilizing, and Communicating Information in Times of Disaster
	⑳ Daily Preparedness
㉑ Skills to Protect Oneself and Survive	

※ In addition to the 21 specific items, each school can set its own school-specific ‘items’ based on local conditions.

1 Setting Sail Towards the Future

Horaguchi Rui, second year, Kamaishi High School

Kick-off speech for the opening ceremony of
the Kamaishi Unosumai Memorial Stadium:

We have recovered and will move onwards from the earthquake.

The Kamaishi Unosumai Memorial Stadium was built on the former grounds of Unosumai Elementary School and Kamaishi Higashi Junior High School, both submerged by the tsunami that followed the Great East Japan Earthquake. As a symbol of reconstruction, the 2019 Rugby World Cup was held in the stadium, where one high school student made a kick-off speech for the opening ceremony. Her name is Horaguchi Rui, and at the time, she was a student of Unosumai Elementary School on March 11, 2011.



I love Kamaishi because it is a town that is rich in nature and surrounded by the mountains and sea.

I love Kamaishi because it is a pretty town with warm air and people.

I love rugby because in my second year of junior high school, I saw the 2015 Rugby World Cup in England and was moved by the atmosphere of the stadium and the intensity of the match.

I love rugby because I was impressed that the fans from both sides shook hands after the match and then picked up trash together.

Seven years ago, on March 11, I was a third year elementary school student in math

set sail 出航する onwards=onward 前方へ submerge ~を水没させる

class when it happened.

Putting on our winter clothes, we ran up to the fifth floor of the school building. Hearing news of landslides, we ran away to a higher place.

If I had looked behind me, I might have seen the tsunami, which was swallowing up our town.

But I kept thinking, "I gotta get away!" and did not stop.

Fortunately, we came across a truck, rode in the back, and evacuated to the town gymnasium.

I waited in line there to get one rice cracker to share between two people.

I also got a glass of water. I cannot remember very well how I felt then.

However, I can remember eating a rice ball a few days later and feeling happy to be alive.



"What happened in Kamaishi" became the story of the successful evacuation of all children attending each school on the day of the disaster. Both schools were relocated to higher ground, and the Kamaishi Unosumai Memorial Stadium was constructed on their former site.

In 2019, my beloved Kamaishi will hold the international championship of the sport I love—rugby.

Now that this stadium is complete, Kamaishi will be connected to the rest of the world.

I really want to express my gratitude to everyone across Japan and across the world, who supported us all in Kamaishi during those hard times.

This stadium stands where two schools used to be. One was the elementary school I went to, and the other was the junior high school I was supposed to go to.

It is also a special place where I can see friends again after being separated for so long.

This stadium was born from such hopes and memories.

I am thankful that we can celebrate this special day with everyone in Japan who loves Kamaishi and everyone who loves rugby.

Thank you everyone in the world for your support.

We have recovered and will move onwards from the earthquake.

We are looking forward to seeing you in Kamaishi next year.

Today, with our full gratitude on board, this stadium will set sail towards the future.

August 19, 2018

landslide 土砂崩れ If I had looked behind me, I might have seen the tsunami ~ もし後ろを振り返ったら、津波を見たかもしれない(仮定法過去完了の用法) swallow up ~ ~をすっかり飲み込む come across ~ ~に偶然出会う
wait in a line 一列に並んで待つ used to ~ (以前は)~だった be supposed to ~ ~することになっている
on board 船 [飛行機や列車など] に乗って

2 A New Brand of Rice "Takata no Yume" Growing in the Sea Breeze and Sunlight of Rikuzentakata City

The Great East Japan Earthquake also caused great damage to agriculture. Takata no Yume, a new brand of rice from Rikuzentakata City came to be a symbol for the restoration of agriculture in the affected areas.



A rice harvest ceremony in 2018. By the efforts of many collaborators, Rikuzentakata's tasty rice "Takata no Yume" was born.

Beginning with a 1,488 Square Meters Rice Field

In Rikuzentakata City, about 383 hectares of agricultural land was damaged by the Great East Japan Earthquake.

The tsunami hit the fields sweeping up the topsoil, and the earthquake caused the ground to subside, making it impossible to drain water to the sea and raise the ground level. Even in the fields that were located on higher ground and spared from the tsunami, farmers could hardly cultivate rice because the irrigation facilities which had drawn water from the Kesen River were also damaged.

Only a few rice fields would recover even though a year had passed since the earthquake.

However, in June 2012, rice seedlings were transplanted onto a 1,488 square-meter field in Yonesaki, Rikuzentakata City.

The variety of the rice, which they called "Iwata 13" at the time, was developed by cross-pollination of three rice varieties—Aoinokaze (which is resistant against rice blast disease and does not fall easily from wind), Akitakomachi, and Hitomebore. It is unique because it is as delicious as Akitakomachi and Hitomebore and as resistant as Aoinokaze against rice blast disease. It is good for making rice balls as it remains tasty even after cooling.

The seed rice was a special donation from the Plant Innovation Center of Japan Tobacco Inc. (JT).

Of note was a volunteer from Tokyo who came to Rikuzentakata after the earthquake. He asked researchers from JT to utilize the company's expertise to help the city hand down its resources to future generations as a symbol of agricultural

topsoil 表土 ground to subside 地盤沈下 variety 品種 cross-pollination 他家受粉
blast disease イモチ病 seed rice 種もみ

restoration. Among the new varieties of rice, which JT was storing for research, "Iwata 13" was singled out.

The following year, with this new brand of rice named "Takata no Yume," Rikuzentakata took the first step towards agricultural restoration.



At Moritora Farm in the Toranomon district of Tokyo, participants enjoyed planting and experienced rice cultivation. The board with their messages stands on the rice field in Rikuzentakata city.

To be the Brand of Customers' Choice

The rice plants grew in the sea breeze rich in minerals and sunlight. They ripened into ears, and 1,124 kilograms of "Iwata 13" was harvested in September. The harvest had a low yield as it was used for tasting and seed rice for the next year.

In November, a rice tasting party was held in Tokyo, where the name of the rice was announced by the mayor of Rikuzentakata City who said, "Takata no Yume is a rice that carries our dreams, and I want our rice to be loved by all the people in Japan."

June 2013 marked the first rice planting since the naming of "Takata no Yume". Twelve certified farmers in the city transplanted rice in about 10 hectares of field and about 50 tons of rice was expected to be harvested in autumn. Usually, a grain collection organization buys harvested rice and many rice wholesalers are involved in the distribution network, but the "Takata no Yume" farmers decided to sell the rice in the market themselves.

This effort was not only for agricultural restoration but also for agricultural innovation, which enabled the farmers to connect with consumers and to gain a sense of satisfaction. As a result, "Takata no Yume" began to be sold at department stores, local supermarkets, and online shops.

Setting the goal of planting 54 hectares and harvesting 150 tons of rice for 2014, the actual harvest resulted in about 259 tons of rice, greatly exceeding the previous year. This was reported through media outlets such as TV programs and magazines, which resulted in many purchase requests throughout Japan with clients exclaiming, "I want to buy this on a regular basis," "We want to use this for school lunches," and "We want to serve this at our company cafeteria."

As a symbol of the restoration of agriculture, "Takata no Yume" continues to be planted and harvested. In 2019, 45 farmers harvested a yield of about 260 tons.

One of the "Takata no Yume" farmers said, "We would like to express our gratitude to everyone who supported us. While we greatly appreciate those who eat our rice 'for the sake of restoration,' we will work even harder so everyone can say they eat our rice 'because it is delicious'."

grain collection organization 穀物集荷団体 rice wholesalers 米卸業者 involve in ~ ~に参加させる
distribution network 流通網

3 A Friendship Bound by Singing: The Music Clubs of Kozukata High School & Kamaishi High School

In March 2011, the Great East Japan Earthquake robbed the music club members of Kamaishi High School of their club. Then, the music club members of Kozukata High School said, "Let's sing together." The friendship between both music clubs has since continued.

Delivering Hope, Joy, Liveliness, and Smiles with Our Singing!

The music club of Kozukata High School has achieved excellent results in the Japan Choral Association's National Choral Competition and the Fukushima Vocal Ensemble Competition. However, their goal is not only to succeed in competitions, but also to communicate with people throughout the world through their singing. To do this, they perform as many as 50 concerts a year at nursing homes and various events, and hold an overseas concert every two years.



Kozukata's music club members singing for the elderly people at a geriatric health services facility

Singing to Pray for Restoration Is Our Mission

The members of the Kozukata music club place a lot of importance on their performances to support recovering from the Great East Japan Earthquake.

On the day of the disaster, the members evacuated outside from the music room during club activities. Their overnight training camp, which was scheduled the next day, was cancelled. When club activities restarted two weeks later, all they wanted to do was to go to the affected areas to sing.

The roads were covered with rubble, but they fortunately were able to receive gasoline, crammed relief supplies into a bus, and headed for the coast on April 1. Seeing endless piles of rubble and collapsed houses across the coast, they were at a loss for words.

Feeling anxious, they went to the evacuation center and found some space to sing. Though people looked at the young singers with dubious eyes at first, they gradually began to clap their hands and children danced to their music. In the end, they sang together. Although the club members intended to cheer people up at the center, they

as many as ~ (加算名詞に対して) ~もの数の geriatric health services facility 老健施設
overnight training camp 合宿 rubble 瓦礫 relief supplies 支援物資 be at a loss for words 言葉を失った
evacuation center 避難所 dubious eyes いぶかしげな眼差し evacuee 被災者

also gained courage from the evacuees.

Music has the power to relieve the minds and emotions of people dealing with a harsh reality and their grief. The Kozukata club members believe in the power of music and continue to support anyone affected.

A Promise with Kamaishi's Music Club Members

A friendship between Kamaishi's music club and Kozukata's music club began in January 2011, two months before the earthquake happened.

The families and houses of the club members were affected by the disaster on March 11. Their school building had survived but was being used as an evacuation center, and the Civic Cultural Hall was damaged by the tsunami, so they could not continue to practice singing.

It was then that members from Kozukata's music club offered a helping hand to them. Just 2 months after the disaster, Kamaishi's club members were able to visit Kozukata High School in May. They went on a training camp together and practiced songs for the competition. In July, Kamaishi's members were invited to sing with their friends at a regular concert at Kozukata High School, where a fund-raising activity for Kamaishi High School was carried out. They collected as much as 350 thousand yen.

Both clubs promised that their support activities would continue until they stood together on stage in Kamaishi. Their promise would be passed down for years to come.

On July 29, 2018, their dream finally came true after seven years.

At the Kamaishi Civic Hall TETTO, which was constructed as a substitute for the damaged Civic Cultural Hall, Kamaishi High School held their regular concert and Kozukata's members were invited. They sang popular songs together such as "Kazoku ni naro yo (Let's Be a Family)," "Tomo—Tabidachi no toki (Friend—When We Are on a Journey)," "Ruri-iro no chikyū (The Lapis Lazuli Earth)," and so on.

Kamaishi's members said, "We have heard about the promise with Kozukata from our senior members. Today we feel relieved to realize our dream."

The friendship between the schools is treasured and represents their continued support for the restoration from the disaster.

harsh reality 過酷な現実 fund-raising activity 募金活動 as much as ~ (付加算名詞に対して) ~もの数の
pass down ~ ~を受け継ぐ



Their dream came true. Members from both music clubs stood on the same stage in Kamaishi Civic Hall TETTO on July 29, 2018.



Kamaishi's music club members took part in the 29th Iwate Choral Association's Vocal Ensemble Contest on January 25, 2020 and won the silver prize. The club gained more members and became more motivated saying, "We want to encourage people with our singing."

4 Small School Summit by High School Students



Student representatives from Ohno High School, Sumita Senior High School, Miyako Kita High School and Nishiwaga High School gathered to discuss what they could do to make their schools more appealing.

Opening: School Introductions

The Small School Summit began with introducing each school.

● Ohno High School

Ohno High School conducts community-based education to have close contact with locals. Students are involved in two major activities for this: one is maintenance of the local woodlands, which all the students carry out in June and July every year, and the other is the harvest festival, where they participate in gathering *matsutake* mushrooms in October. The school art program also offers handicrafts since woodwork is popular in Ohno.



Local woodland maintenance in Kujihiradake (Ohno High School)

● Sumita Senior High School

One of their unique activities is volunteering for a forest nursery school. Students take a walk in the forest and play in the river with the local nursery school children. They enjoy learning about being a volunteer by communicating with the children. The overseas training program is also attractive. Six students take part in the program every year and stay with a host family in Australia for about two weeks.



Walking in the forest with children from the nursery school (Sumita Senior High School)

● Miyako Kita High School

Students participate in many community-based school events and hold unique activities such as monthly school assembly called “The Forests of Miya-Kita” and disaster-prevention education called “Taro-Gaku.” They also have two annual sports festivals called the “Spring Olympia” and the “Autumn Olympia.” As the population is declining in this area, the local community needs students’ help when the events are held.



Monthly school assembly (Miyako Kita High School)

community-based 地域密着型の one ~ the other... (二者のうち) 一方は~で他方は... nursery school 保育園
The Forests of Miya-Kita 「宮北の森」 disaster-prevention 防災

● Nishiwaga High School

One of the strong points of Nishiwaga High School is that it adopts a careful teaching system by taking advantage of being a small school. Especially for math and English, teachers at Nishiwaga give classes in small groups based on students’ individual learning levels, so they can acquire fundamental academic skills. This system is popular among students because they become motivated to learn and feel the joy of understanding concepts. From 2017, the school has been carrying out two unique programs: “The School for Designing 100 years of Life” and “a program where students conduct interviews with the elderly.”



Conducting interviews with the elderly (Nishiwaga High School)

How to Make Small Schools Attractive

After the introduction of each school, students were divided into four groups and discussed how to cooperate with their local governments and how to make their schools attractive.

They exchanged various ideas based on their experiences, some of which are as follows: “High school students need to make contributions to their community to promote their school to junior high school students.” and “It would be nice if junior high school students could have a chance to experience high school life as part of a trial. Flexibility is desired such that students can move to another school easily if they feel their current school does not suit them.”

Closing: Group Presentation Summary

From within multiple ideas, chairperson of the summit instructed participants to introduce only one idea to other groups. Each group chose one idea from many written on the whiteboard and made the following presentations:

Group 1 It would be better for current high school students to visit junior high schools and talk about their experiences rather than teachers giving explanations.

Group 2 It would be nice if the trial enrollment were longer, so that the townspeople as well as junior high school students can experience high school life.

Group 3 We don’t like the expression “small school.” We would like to use words which give a positive impression, such as “pretty school” instead of “small.”

Group 4 Communicating with junior high school students is important. We need to have time to spend with junior high school students talking about the overseas training program and so on.



Students having group discussions



Each group presenting their ideas

take advantage of ~ ~の強みを生かす fundamental academic skills 基礎学力 The School for Designing 100 years of Life 「いのち輝く百年創造塾」 divide ~ into ... groups ~を...のグループに分ける local government 地元の自治体 make a contribution to ~ ~に貢献する current 現役の trial enrollment 体験入学 positive impression 好印象

5 Abe Yurika, Para Cross-Country Skier Overcoming Hardships after the Great East Japan Earthquake and Making Dreams Come True



Ms. Abe Yurika

Ms. Abe Yurika, who was born and raised in Yamada Town, had never seen cross-country skiing, much less tried it, until she watched the cross-country skiing competition in the Paralympics on TV by chance. It motivated her to take up the challenge. She won eighth place in the 2014 Sochi Paralympic Winter Games and won fourth place in the mixed relay in the 2018 PyeongChang Paralympics.

Entering Morioka Minami High School for Skiing

Her upper left arm became paralyzed in an accident at birth, but Ms. Abe was on the volleyball team at Yamada Junior High School. When she watched a cross-country skiing competition at the 2010 Vancouver Paralympic Winter Games on TV by chance she was so moved to see a player with an arm impairment skiing with one pole that she wanted to start cross-country skiing, something she had never done before.

She immediately made contact with the head coach of Hitachi Solutions' ski team, that appeared on TV. Her passion allowed her to take part in the Hitachi Solutions' junior camp in Hokkaido, whose purpose was to discover young talented players. It was held during the New Year holiday when she was in her third year of junior high school. However, a few months later the Great East Japan Earthquake occurred, and she lost her house in a fire that followed the tsunami.

Even so, she did not lose her passion for skiing. She gave up entering Yamada High School despite having passed the entrance exam and decided to go to Morioka Minami High School where she could ski, thanks to the government's special measures for victims of the disaster. She joined Morioka-Minami's ski club as well as the junior ski club of Hitachi Solutions' youth ski team.

Overcoming Hardships with Indomitable Spirit

Wanting to realize her dream, Ms. Abe took initiative and made every effort to achieve her goal. What played a big part was being able to accept her own ability and potential. She even seemed to enjoy the process in spite of the hardships.

much less ~ まして~はない until ~ ~にして初めて by chance 偶然に paralyzed 麻痺した
with an arm impairment 片腕に障害のある the special measures 特別措置 indomitable spirit 不屈の精神

When she entered Morioka Minami High School, she had to start completely from scratch and did not have enough stamina and strength to ski. With her disability, she could not practice like the other members did and was given her own training routine at first. She did not give up and spent a good deal of time on track and field practice and strength training. In roller ski practice, it was so hard for her to move forward while keeping her balance at first that she stumbled over small bumps on the road or small stones. She fell many times and got a lot of scratches.



Ms. Abe practicing roller skiing

Though her head coach worried that she would give up, she worked hard and gradually started to participate in the same training as the other members. In her second year, her strength and skill improved enough that she was able to prepare and participate in a skiing competition without any problems. She owes much of her success to her homeroom teacher, her coach, and her club members who devoted themselves in supporting her, not to mention her own extraordinary effort.

Skiing to Inspire Those Affected by the Disaster

What gives her such positivity? Her strong desire not to submit to the suffering she experienced from losing her house and hometown and to the grief from her friends losing their lives. She said, "though I am disabled as well as a victim of the disaster, I think if I keep trying, there's nothing I can't do. I really want Yamada Town, once a lively port town, to be revived." She also said with gratitude, "it's worth working hard if I could help even one more victim. I want to repay my family and my community who encourage me as well as all those involved in skiing and school who support me." Such strong desire has given her the strength to survive in an unfamiliar environment and endure tough practice, giving birth to her indomitable spirit.

Currently, Ms. Abe is an athlete who participates in cross-country skiing and biathlons and competes in international events such as the Para Nordic Skiing World Cup.



2016 Japan Para Cross-Country Skiing Championships (Hakuba, Nagano Prefecture)

(4 photos: provided by Hitachi Solutions, Ltd.)

from scratch ゼロから spend a good deal of time 長い時間を費やす stumble over a small bump on the road
道の段差につまずいて転倒する owe to ~ ~に恩恵をこうもっている not to mention ~ ~はいうまでもなく

6 Hanamaki Kita High School's Outbound Program to ASMSA

ASMSA stands for the Arkansas School for Mathematics, Science and the Arts, which is located in Hot Springs City, Arkansas. It is one of 16 boarding high schools in the USA. Hanamaki Kita High School established a sister school relationship with ASMSA in September 2016, and Hanamaki Kita students learn a lot of things through interaction with ASMSA students.

The Beginning of the Outbound Program

Hanamaki Kita High School started their outbound program to ASMSA in 2017. Four first and second-year students and two accompanying teachers participated from November 3rd to 12th.

They boarded the bullet train at Shin-Hanamaki Station in the morning on November 11th and arrived at a hotel in Hot Springs City at 11 p.m. (local time). The next day, on November 4th, they met their host families and spent time with them on the 4th and 5th, then attended classes at ASMSA on the 6th.



Attending a class of ASMSA at 2017



Group photo at ASMSA in 2018

Size and Facilities

"It's so big!" Hanamaki-Kita students were surprised at the large area at first. They were also surprised at the facilities because almost all the classrooms were equipped with a projector and an electronic blackboard, and students were provided with PCs. Even more surprising was that the buildings were strictly guarded. When students entered the school, they had to unlock the door with a card key, and surveillance cameras were installed everywhere.



ASMSA Students Center

Experiencing Japanese Class

At the entrance of the classroom, a shop curtain was hung with the phrase, "Don't be defeated by the rain" written in Japanese. The class proceeded as follows:

- ① **Introductions:** All the students introduced themselves.
- ② **Pair Work:** ASMSA students and Hanamaki-Kita students got in pairs and learned together using a Japanese textbook.

outbound 外国行きの stand for ~ ~を表す bullet train 新幹線 be equipped with ~ ~を備えている
surveillance camera 防犯カメラ shop curtain のれん

- ③ **Singing:** All the students sang while watching "Ten Little Indians" on YouTube.
- ④ **Ball Activity:** The teacher threw a beach ball and exchanged questions and answers with the student who caught the ball.
- ⑤ **Grammar:** The teacher briefly introduced a new grammatical concept to the students. By speaking with the Hanamaki-Kita students, the teacher was also able to learn a few new things.
- ⑥ **Group Work:** Students were divided into four groups and learned vocabulary using an application on the Internet.
- ⑦ **Final Comments:** The teacher asked if they enjoyed and understood the lesson before ending the class.

The ASMSA class was very different from class in Japan. For example, they had a small class of ten students, students used their smartphones in class, their learning and development depended on their own initiative, and lastly, the layout of desks and chairs as well as bulletins and notices did not have the same kind of Japanese orderliness to them.

One of the students said, "What was most attractive was that they could make a school timetable themselves. American schools have far more electives compared to Japanese ones. ASMSA students have said they can make their own timetables to help realize their dream. I like this system."

Objective and Result

In the outbound program, students choose their own learning tasks.

For example, Ms. Ouchi, a second-year student, set herself the task of researching "popular Japanese culture in Arkansas." After she ate at a Japanese restaurant and bought sweets at confectionary shops downtown, she said, "We were able to eat delicious Japanese food in restaurants as well as the local shops."

Ms. Araya, also a second-year student, said, "I was impressed with American students challenging themselves without being afraid of making mistakes."

Survey on the Outbound Program

Some students conducted a survey for their learning tasks in the second outbound program in 2018. Ms. Furuya, a second-year student, researched the difference between how people think about multiculturalism in Japan and the USA.

- Q1 Do you think your country is a multicultural society?
- Q2 (For people who reply "Yes") Why do you think your country is a multicultural society?
- Q3 (For people who reply "No") Why do you think your country is not a multicultural society?
- Q4 (For Japanese students) Why do you think your country is not a multicultural society?

Ms. Furuya said the following about her findings: "Surprisingly, many Japanese people felt that Japan is a multicultural society. But I found that Americans felt their society was more multicultural than the Japanese and I also found that they have a strong stance towards accepting it."

multicultural society 多文化社会

7 Taneichi High School Nurturing Specialists in Ocean Development

Divers in Taneichi, Hirono Town are called “Nambu Divers” or “Nambu Moguri.” Taneichi High School, famous for its Ocean Development Course, helps train these divers.



A student getting dressed in a standard diving suit for diving practice

Nambu divers are trained to be active not only domestically but also internationally

Taneichi Graduates Are Very Active Both Inside and Outside of Japan

Taneichi High School is the only school providing an Ocean Development Course, where the students can learn basic knowledge and techniques for diving and civil engineering.

Students practice surveying and slinging (hanging materials on the crane, etc. and removing them) as part of course. They also practice mechanical techniques such as welding, which is not usually taught in civil engineering-related courses.

This is because the school wants to help develop professionals who acquire basic knowledge and techniques for how to handle observation equipment and how to take measurements with them. They also want them to acquire advanced techniques for ocean civil engineering.

The graduates are active both inside and outside of Japan in various fields such as port and harbor construction, bridge construction, and ocean research. A remarkable 20% of licensed divers in Japan who passed the national examination are Taneichi graduates.

The picture above shows students practicing in Taneichi’s diving pool.

ocean development 海洋開発 be active 活躍する civil engineering 土木 slinging 玉掛け welding 溶接

The Importance of Support from a Diving Tender (Buddy)

The helmet, weighing about 20 kg, consists of a part that covers one’s head as well as a neck guard called a “shikoro,” which is attached to the suit firmly with screws and prevents water from leaking into the diving suit. The cup is connected with a hose which supplies air to the diver.

The diving suit is waterproof, preventing any water from leaking in, as well as any air from leaking out.

Divers put on footwear weighing about 20 kg in order to retain balance and attach weights of about 25-30 kg to the front and back of the neck guard which prevent their body from floating.

As the weights exceed a total of 70 kg, it is impossible for them to put on and take off their suit by themselves.

These days, divers usually use new and lighter diving equipment such as the Hookah type and scuba type, which are easier for divers to put on and take off and enable them to move more freely. Though the standard diving suit is old-fashioned, the school continues to use it because it is good for long dives in cold waters and for handling heavy goods taking advantage of the buoyancy. Another reason for using the suit is because the students learn that they cannot do everything by themselves.

While divers are in the sea, they need someone to take care of their air supply hose and communication cable. They can do their best thanks to a diving tender who remains above the water. The students in standard diving suits learn how important the tenders’ support is.

Divers handle many kinds of jobs. For example: salvaging, which is investigating and raising stranded and sunken ships; underwater construction, which is building bases of harbors and breakwaters as well as bridge piers and abutments; ocean research, which is investigating the conditions of living things, resources, geological features and structures in the sea; and inspection and repair of cultivation facilities and fixed fishing nets.

In Japan, divers were involved in restoration work of a harbor damaged by the Great East Japan Earthquake, the construction of Kansai Airport and expansion work at Haneda Airport. Overseas, “Nambu divers” were involved in laying pipelines and dealing with undetonated bombs in conflict-affected regions. Every year, Taneichi High School produces about ten divers who are active in these various fields.



The helmet for the suit



The helmet from the picture to the left being placed on the student’s head

tender 世話をする人、テンダー buddy 相棒、パディ waterproof 防水の weight おもり
take advantage of～ ～をいかす buoyancy 浮力 salvage サルベージ strand ～を座礁させる pier 橋脚
abutment 橋台 cultivation 養殖 fixed fishing net 定置網 undetonated bomb 不発弾
conflict-affected region 紛争地域

8 The Power of Cooking

Maita Rino, third year, Kuji Higashi High School

None of us will ever forget experiencing the Great East Japan Earthquake. However, many of us thought about what helped us most and what we could do, which influenced our future jobs and way of life. For Ms. Maita, it was a soup kitchen that became her inspiration.

Saved by a Soup Kitchen

I decided to be a cook after the Great East Japan Earthquake occurred. I will never forget the day of March 11 when our village was plunged into darkness. However, what impressed me most was the soup kitchen. When people in our village, who had lost hope, ate the hot soup and rice balls, their faces turned into smiles all at once.

I was in my third year of elementary school when the tsunami struck our village and ruined the beautiful landscape in an instant. Although the adults were helping in various ways, I myself could not do anything. After I became a junior high school student, however, I thought there had to be something I could do to help. I could not forget seeing the food being served at the soup kitchen, so I started to think I could also cook the food that makes so many people smile from the bottom of their hearts.

Deciding to be a Cook

When I was in my second year of junior high school, I learned that I could obtain a cooking license at Kuji Higashi High School. Visiting the school festival for the first time, I found they had opened a nice cafeteria which was like a professionally run restaurant. I thought I could realize my dream there and decided to enter the school without hesitation to learn cooking.

As Kuji Higashi High School is an integrated course high school, all the first-year students study the same subjects. When I became a second-year student, I chose the culinary course as I wanted to obtain a cooking license. Compared to my first year, everything went by so fast. On the first day of cooking class, we learned basic cooking skills soon after a brief explanation of the cooking room. I wondered if I would be left behind if I lost my concentration even a little. As both my parents had jobs, I cooked dinner when I went home early from school or on holidays, but special skills were needed for everything, which was completely different from cooking at home. I had many things to learn, much more than I had imagined.

I felt very nervous about the cooking class we had



soup kitchen 炊き出し plunge into ~ (苦境などに突き落とす) without hesitation 躊躇なく
integrated course 総合学科 left behind 置いていかれる

twice a week at the beginning of the second year. I could never finish cooking on time and could not plate food or bake well, so my teacher always gave me harsh comments. However, I was determined to do my best so I made sure to start fresh every day so I could work harder and get more favorable comments.

Encouraged by Visitors to the School Festival

In October, we have a school festival, which is one of the appeals of our school. About three thousand people come visit every year. All the culinary students prepare for over a week: precooking vegetables, meat and fish, as well as making broth for ramen. On the day of the festival, we get together early in the morning and work very hard to make each dish. Since the festival lasts for two days, it would not be possible for us to manage the cafeteria ourselves, so students from other courses as well as first-year students help us take orders and carry plates. We cannot hear the voices of our customers nor see their faces when they are eating.



After finishing the first day of the festival, we make preparations for the next day, and after finishing the second day, we have to clean up thoroughly. It is tough work, but I am looking forward to this year's festival because I received, both directly and indirectly, many comments from customers like "I visited your cafeteria!", "it tasted so good!", and "I want to eat there again."

These comments made me realize cooking was worth the effort and I first experienced how wonderful it is to serve the dishes I made. Since third-year students will have a chance to talk with customers, I will try even harder this year so that more customers get to eat delicious food.

Showing Gratitude by Serving Delicious Food

After graduating from high school, I will go to a vocational school to acquire more skills and more specialized knowledge. I want to cook at various restaurants and hotels to gain experience because my goal is to make people smile with my cooking. It was very hard for me to decide which cuisine I would specialize in, but I chose Western cuisine. This is because I want to know what makes Italian and French dishes special. What I think is important for this is to use ingredients that come from the area or country. I want to go abroad as well to learn Western cuisine, but my final goal is to eventually return to my hometown. I want to show my gratitude to the people in my hometown, who inspired my dreams by cooking delicious food for them. I want to help those who suffer not only from natural disasters like the earthquake, but any kind of problem, just like the heart-warming dishes served at the soup kitchen which made people smile did.

With the gratitude I have for everything around me now, I will work towards making my dream come true.

on time 時間内に broth だし vocational school 専門学校

9 Competitive Karuta Club of Ichinoseki Daiichi High School: Fighting on Tatami Mats

“Chihayaburu...” “Whack!” The players compete to grab the cards on the tatami mat. The competitive *karuta* club is classified as a culture club, but it requires physical and mental strength like a sports club.

A Veteran Team with Consecutive Appearances in the Karuta Koshien Tournament



Ogura Hyakunin Isshu Karuta Tournament at the 43rd All Japan High School Culture Festival (Saga Sobun)

The annual All Japan High School Ogura Hyakunin Isshu Karuta Tournament, known as Karuta Koshien, takes place in Otsu City, Shiga Prefecture every July. Ichinoseki Daiichi High School's competitive *karuta* club participated in 14 consecutive tournaments from 2006 to 2019, reaching the quarterfinals in 2009. Their strict training routine includes daily practice sessions,

starting with stretches and ending with strength exercises to develop essential core muscles for quickly taking cards by hand while balancing on knees and arms.

Competitive karuta is appealing because anyone can be a good player if they put in the effort.

The members of the *karuta* club express, “We practice hard to be good players” and “The more we practice, the more confident we become.” Competitive *karuta* demands memorization and agility. Players memorize every card on the field and use their agility through techniques such as touching, swiping, flicking, and guarding. This is why the competitive *karuta* is called “a fighting game on tatami mats.”

Ichinoseki Daiichi's competitive *karuta* club achieved the quarterfinals in Karuta Koshien once in their 20-year club history. Their current objective is to reach the quarterfinals again and advance to the semifinals. One member states, “I want to train my mental strength to win more,” and another says, “I initially joined this club admiring senior members, and now I want to achieve better results than our seniors.”



The club members playing practice matches.

consecutive 連続して the quarterfinals ベスト8 (準々決勝) advance to the semifinals ベスト4 (準決勝) に進出する

10 Kanegasaki High School Establishes 10 Rules for Smartphone Etiquette

With over 90% of high school students owning smartphones, these devices bring both convenience and challenges. Explore the “Ten Rules for Smartphone Manners” proposed by Kanegasaki High School students.

10 Rules for Smartphone Etiquette as Proposed by Students

Kanegasaki High School's 10 rules for Smartphone Etiquette were proposed by the student council president and discussed in a council meeting. Before these rules,



The general meeting of the student council of Kanegasaki High School

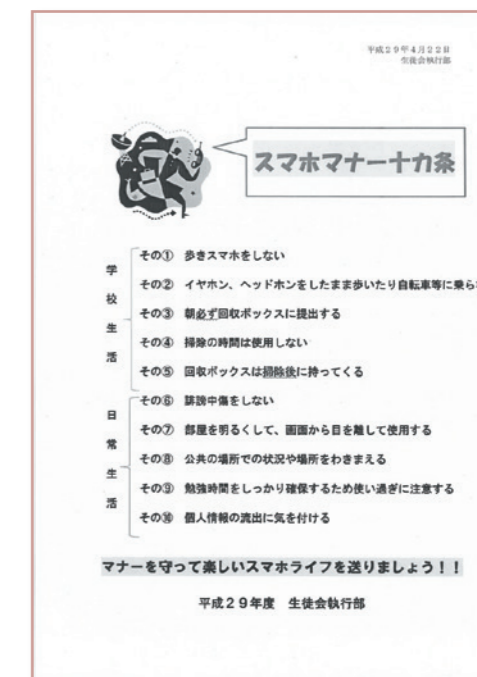
students simply stored phones in a collection box upon arrival and collected them after school, lacking specific usage guidelines. In 2016, the newly appointed president presented the rules, mostly accepted without changes, after considering their necessity.

Making Good Use of Smartphones

Kanegasaki High School students spend their school life with an awareness of the 10 rules. If they are late for class and cannot put their smartphones in the collection box, they go to the teachers' room to put them in the box between classes. All the problems with smartphones have not been solved, however. Kanegasaki High School's students and teachers think it is necessary to establish other rules about social media, as some students have trouble with it.

Many students think using smartphones means less time to talk with their friends and family and less time to sleep. Some students check their smartphones whenever they have time and spend most of their days inside their room.

Smartphones are necessary for our modern life, but we have to learn ways to make good use of them to maintain our mental health.



student council president 生徒会長 general meeting of the student council 生徒総会 newly appointed 新任の

11 Miyako Fisheries High School Students Emphasize the Importance of Eating

The students of Miyako Fisheries High School learn what is necessary for people to survive, such as catching, cultivating, processing, cooking, and eating food. This article will introduce food education and disaster prevention activities that take advantage of the school's specialties.

Cooking Class Tours

Since 2008, students in the culinary course visit local nursery schools to hold cooking classes for children. When the Great East Japan Earthquake occurred on March 11, 2011, they stopped this activity but started again in October at the nursery school's eager request. Students affected by the earthquake found healing by communicating with children and became more cheerful.



Cooking class for elementary students

Students made comments: "I learned how important and how difficult it is to teach children considering their character and their own pace," "As an earthquake victim, I realized the importance of cooking under restriction," and "Eating provides energy and vitality."

The parents of the children thanked them. One parent said, "I noticed my child can do things that he wasn't able to do at home." Another said, "My daughter helps me and became interested in the cooking process."

Training for Emergencies Using Fishery Training Ships

In May 2017, Miyako Fisheries High School students conducted an emergency food distribution drill on their two fishery training ships with students of Fujiwara Elementary School (currently Sokei Elementary School) and Kanan Junior High School. The high school students cooked curry and rice in the ship kitchens, and elementary and Junior high students carried the dishes to other drill participants. They cooked as many as 350 dishes within three hours, which was efficient enough.



Students cooking quickly and carefully



Two students serving curry and rice at the food distribution drill.

This event made young students think about what they could do in times of emergency, while the high school students felt satisfied with their work.

People in Miyako City hope for an improved disaster prevention system through the cooperation of local schools.

12 Physical Health and Club Activities

It is necessary for us to keep our bodies healthy. We can promote good health and fitness through exercising and sports. Let's think about how to improve our health by participating in club activities.

Building Physical and Mental Strength to Stay Healthy

By joining one of the sports clubs and aiming to achieve good technique and better results, you will feel the joy of sports and enrich your school life.

You can also improve your concentration, promote physical and mental growth, and develop physical strength through club activities.

It can help your development greatly because it teaches you to respect and collaborate with your colleagues as well as value fairness and discipline. It also helps your sense of self-control and develops your practical ability to think and judge. Sports build up a healthy mind and body as well as a rich personality.

If you join one of the culture clubs by taking on the challenge of entering competitions, contests, or recitals to achieve your goal and improve your sense of cooperation and self-esteem, you could one day walk the path of a professional.

Sports and cultural activities promote a balance of physical and mental growth and foster a "zest for living" equally balanced in knowledge, morals, and physical health. Through club activities, you can acquire fundamental abilities such as physical strength, concentration, good judgement, and cooperation with others. You can continue to grow and develop these abilities throughout your life, and they will help you deal with situations in a flexible manner.



13 Message to That Little Girl A Note Written by a Victim of the Great East Japan Earthquake

On that day the earthquake occurred, Ms. Abe Keiko, who lived in Otsuchi Town, visited Morioka City with her husband who drove her there. As both the Tono-ji Road and New Sennin-toge Road were closed, they couldn't return home and had no choice but to stay an anxiety-filled night at the Matsukura District Community Fire Prevention Center in Kamaishi City.

Beyond repair?

Earthquake Early Warning!

I hurried to go outside after my phone rang loudly. As the building was shaking a lot, I crouched down in the parking lot, worrying that the ground might start cracking. Looking around, the red traffic light was blinking, the road jammed with cars. Will my husband be able to come to pick me up?

I had a meeting of social education leaders in a community center in Morioka City on that day. The earthquake happened soon after I called my husband to pick me up as the meeting had finished.

About 20 minutes later, I was relieved to see my husband's car, but his words made me nervous again all at once, "A tsunami is coming soon."

I wondered what would happen to our district of Ando in Otsuchi Town, which was located near the dike and could not escape the tsunami. When the Chilean Earthquake hit, the resulting tsunami flooded my house. I dropped by a farmer's store and bought some Dango (sweet rice dumplings) and bread in order to stock up on necessary food. The clerk used a calculator and an old abacus for my payment, as the cash register became useless due to the blackout.

When we arrived at Tono-ji Road, the police and the crossing guard said while waving their guide lights, "The bridge is uneven. It is too dangerous to cross. You must go back."

We changed our plans and decided to take the Old Sennin-toge Road, taking care to drive safely. It was quite dark when we passed the road to Kamaishi and Matsukura.

When we arrived near Gono-hash, we saw a crowd of people and guide lights busily moving.

"You cannot go any further because the road has collapsed."

"We want to go back home to Otsuchi."

"Otsuchi? It's beyond repair. You had better go back."

Beyond repair? What does that even mean? We had no choice but to go back and look for a place to stay the night.

At first, we went to Kamaishi Hospital where injured people were carried one by one, but there was no space for us.

We also visited the junior high school near the hospital, but they told us that they did

have no choice but to ~ ~せざるを得ない crouch down しゃがむ ground cracks 地割れ
social education leaders 社会教育指導員 Ando (大槌町)安波 dike 堤防 the Chilean Earthquake チリ地震
drop by 立ち寄り due to ~ ~のために blackout 停電 abacus そろばん crossing guard 交通指導員
guide light 誘導灯 uneven 段差のある

not have any heaters and blankets. Thankfully, however, they were able to introduce us to the Matsukura District Fire Prevention Center.

"Can we stay here tonight?"

"Of course, come in, come in."

I was relieved to hear a gentle voice. We got a candle and a holder, and went up to the hall upstairs, where each of us borrowed three cushions; we used one as a pillow and the others as mattresses to warm ourselves up. There were about 10 people who came there for evacuation from all over the city.

"Mommy! Mommy!"

After a while, a young father came in, holding his daughter who looked about two years old. He sat on the cushion and stroked her head with a sad look on his face. I saw her toddle in the dim light, saying "Mommy, Mommy." I slid the candle holder away so that she would not trip over it.

"Mommy, Mommy, Mommy!"

Her voice echoed in the hall helplessly. Suddenly, sadness surged up inside me and I buried my face in the cushions.

I heard the young man and my husband talking, "We haven't done anything wrong. Why is this happening to us?"

Soon after midnight, her voice calling her mother became weak and eventually everybody fell asleep.

The next morning, sunlight beamed into the hall. I decided to talk to her as much as I could in order to make her smile.

"Good morning, my dear. Your pocket is cute. What is inside it? Your hands are cute, too."

Then, the girl began to put her hands in and out of the pocket, and open and close her hands. She was so innocent that tears welled up in my eyes. Holding back tears and forcing a smile, I held her hands gently.



Gratitude

The number of evacuees increased and before I knew it, about 30 people stayed together in the hall. We split the chores, cleaning the hall and restroom.

When I washed my face and brushed my teeth at the sink outside the hall, a delivery from the locals arrived. "Please have a rice ball". I was so hungry that I felt deep gratitude for the food and the kindness of people.

On the fifth day, my daughter and her husband picked us up to move to Ichinohe Town. After moving three times, we finally settled down in Morioka City.

I would like to express my gratitude to people who took care of us at the evacuation center, all the people who supported us, and the members of the media. I will never forget it and want to repay that kindness as much as I can.

I also want to say to that little girl, "Keep your dream alive. Your day will surely come. Surely."

(Collection of notes written by victims of the Great East Japan Earthquake "the Record which We Want to Preserve, the Memories which We Want to Pass down" published by SAVE IWATE)

stroke ~をなでる toddle よちよち歩く surge up (感情などが)こみ上げる well わき出る

14 Friendship between Shizukuishi Senior High School and Yamada Senior High School Started by Germany

Shizukuishi High School and Yamada Senior High School have continued to have exchanges since 2018 due to Germany's assistance in response to the Great East Japan Earthquake.

Repaying Favors to Germany

After the Great East Japan Earthquake, various overseas assistance was provided to Japan, including Shizukuishi Senior High School. In February 1995, the Shizukuishi International Exchange Association established a friendship city agreement with Bad Wimpfen City, Germany (Neckarsulm City joined the agreement later), and since then the student exchange program for junior and high schools of each country has been conducted every year.

Many German students, teachers, and graduates who had visited Shizukuishi Town were very shocked at the news of the earthquake in March 2011. Some German schools that had relationships with schools in Shizukuishi Town took the initiative to start fund-raising activities. They were conducted with the slogan "Schools Support Schools" to appeal to the people in Bad Wimpfen and Neckarsulm. The funds collected were sent to 11 schools on the coast of Iwate Prefecture with the help of the Shizukuishi-German Association "Tsubasa," which was organized by the alumni of exchange students of Shizukuishi and Shizukuishi International Exchange Association.

When the 2020 Tokyo Olympics and Paralympics were held, the Japanese Government decided to invite the countries that supported reconstruction efforts. Under this project called "ARIGATO" Host Town for Supporting Reconstruction, Shizukuishi Town and Yamada Town cooperated to show gratitude for the assistance and sent information about the reconstruction to Germany.



The Delegation from Germany Trying Calligraphy

Friendship between Yamada and Shizukuishi High Schools

In May 2018, German short-term exchange students invited by the Shizukuishi International Exchange Association, students from Shizukuishi High School and Shizukuishi Junior High School, and Shizukuishi Town officers visited Yamada Town. They came up with the idea of setting up an exchange between students from Yamada and Shizukuishi High School. Later, the Shizukuishi student council leadership took part in

the 18th Yamada High School's sports festival "Umi no Undokai" in August.

"Umi no Undokai" was started in 1995 to commemorate the 70th anniversary of the foundation of the school and since then, it has been held every summer, except for during the period when the beach was damaged by the tsunami until 2017. Students participate in seven games and races, including beach volleyball, futsal, and canoeing.

The Students' Voices on "Umi no Undokai" From Both Sides

In 2019, 27 first-year students from Shizukuishi High School took part in "Umi no Undokai" and were surprised at doing a sports festival on the beach. Some students were afraid of the sea, and others felt nervous as they did not know what they were to do. However, as they competed against the Yamada High School students and were cheered by the crowd, they started to enjoy the event. Some Shizukuishi High School students made the following comments: "I couldn't imagine what sort of event it was, but after I participated in it, I realized all the students were very excited so I had lots of fun." "Everything was interesting as I had never played so many sports on a beach before."



A Group of Four in a Running Competition



The Canoe Race

Yamada High School students worked even harder to prepare the event knowing that Shizukuishi High School students would participate. Ms. Sato Haruka (in her third year at that time), chairperson of the festival executive committee said, "I learned how hard it was to plan and manage as a chairperson. It was hard work creating a tournament and setting up the venue, but seeing the smiles from both schools during the festival made me feel happy to hold the event." After the event, students from both schools ate a lamb barbecue which was prepared by the Yamada High School PTA. The "Umi no Undokai" ended with participants cleaning up the beach in the afternoon.

Inviting Yamada High School Students to a Snow Sports Festival

In January 2020, Shizukuishi High School held the annual sports festival in the snow, to which they invited Yamada High School for the first time. Not only the students but also teachers took part in two games and a relay in the snow, including dodge ball, a tire relay



Students Enjoying the Tire Relay in the Snow Together.

and tug-of-war. One Yamada High School student who experienced the sports festival in the snow for the first time said, "I could not pull the tire well on the snow, but it was very fun," and another said, "It was colder in Shizukuishi than in Yamada, but I enjoyed it very much because I had never exercised this much on the snow before."

15 Karumai Senior High School Partners With Elementary and Junior High Schools to Promote Itself

Karumai Town has three elementary schools, one junior high school, and one high school, often working together. Karumai Junior High School and Karumai High School even have joint education program.



Morning Greeting Campaign

Ties Between Karumai Junior High School and Karumai High School

Since 2001, these schools have acted together in various ways in their joint education program.

High school math and English teachers teach at the junior high school 15 times a year each, teaching third year students. High school teachers also teach a 4-day intensive course, hold joint math exams, and prepare the students for the Eiken. The track-and-field, kendo, and basketball clubs from both schools also have joint practice sessions.

They have a volunteer clean-up activity every September called the “Joint Junior High and High School Clean-up.” Students pick up garbage around the town in groups.

The junior high and high school student councils regularly meet, discussing various issues. There’s also the “Morning Greeting Campaign” at both school gates, and high school students also give course guidance to junior high students.



Course guidance to junior high students

Opinions on the Student Council Exchange

Comments from high school students

- It's really exciting to interact with junior high students. I hope we can liven up the whole town through this exchange.
- I'm glad we could come up with a lot of ideas to make this exchange even better.

Comments from junior high school students

- I joined two meetings with the school student council, and I was impressed with their amazing speaking skills.
- I was surprised at how friendly they were. I'd like to talk with them more often.
- I hope to keep working hard with the school students.

The Connection between Elementary Schools and the Community

Since 2018, Karumai High students have visited elementary schools to promote their school festival. Elementary students enjoy food stalls, creative performances, and exhibits there.

Students learn about their town in junior high and then do even more study in high school. Posters are put up at the school festival and in the junior high school to show the local people what they've learned. Culture and athletic club members make use of their strengths to lead their juniors by example.



Junior high students present at high school

joint education 一貫教育 intensive course 集中講義 student council 生徒会 exchange 交流
interact with ~ ~と交流する liven up 盛り上げる come up with ~ ~を思いつく be impressed with ~
~に感銘を受ける put up ~ ~を掲示する

16 Ofunato High School Drama Club Expresses Memories of the Earthquake

Many Ofunato High School drama club members were affected by the Great East Japan Earthquake. In their pursuit in acting, they felt doing a performance on the disaster was unavoidable.

The Path to the All-Tohoku Competition

Many high school drama clubs dream of the All-Japan Drama Competition. The road to the competition isn't easy, and taking part in the All-Tohoku Competition is quite a challenge. Ofunato High School's drama club performed at the All-Tohoku Competition in 2017 and 2018.

In 2017, they performed Ameya Norimizu's *Blue Sheet*. Based on the true story of high school students from Fukushima Prefecture, their version instead featured seven high school students who had planned to enter Kesen Junior High School.



A scene from *Blue Sheet*

The play for 2018 was *Camellia and the Sea*, which was written by their teacher, Tada Chieko. Basing the story on a traditional Kesen tale, “Tsubaki to Umi”, it told the story of high school students walking hand in hand with the trauma of the disaster as they interact with the people around them. With this play, they were able to compete in the All Tohoku Competition twice in a row.

Facing the Great East Japan Earthquake

All the club members experienced the earthquake. They held the trauma of running from the tsunami, feeling helpless as others were taken away by the sea, and seeing their rooms destroyed. With the trauma still fresh, the students felt a great deal of conflict in expressing the disaster through their acting. The director for *Blue Sheet* was worried and asked, “Should we really choose a script that brings back painful memories?” But after much discussion, they decided to go ahead because they were the ones who actually lived through the disaster and could express it the best.

The scriptwriting started with answers from the question, “If you had a time machine, what time period would you travel to?” One student answered, “I'd like to go back to our town before the tsunami and see it.” We cannot take the town that we know and the smiles from the people that we love for granted.

All-Japan Drama Competition 全国高等学校演劇大会 feature ~(の話)を取り上げる, 扱う
script (演劇の)台本, 脚本 take for granted ~[take ~ for granted] ~を当たり前のことと思う

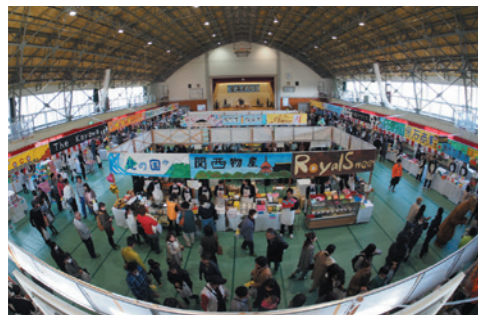
17 Contributing to the Community through Onsite Sales Training with Unique Ideas

High school students are encouraged to sell local specialties and originally developed products in Iwate Prefecture. This article shows you three examples of onsite sales training conducted by high school students.

Miyasho Department Store: A Mock Company Created by Miyako Commercial and Technical High School (formerly Miyako Commercial High School)

Miyako Commercial and Technical High School had held the “Miyasho Market” during the school festival for more than 50 years before renewing the market in 2003 and transforming it into the “Miyasho Department Store”, a mock company. In this company, each student has a stock worth 500 yen and each teacher has three stocks to conduct operations. Students manage all businesses of the mock company including the purchase of goods, sales, merchandise control, accounting, the public relations of each shop, and the general meetings of stockholders.

“Miyasho Department Store” is open for two days every year. While the amount of sales was about 1.89 million yen in the first year of its establishment, it reached about 5.45 million yen in 2018, triple the amount of the first year. Even when the Great East Japan Earthquake occurred in 2011, they still opened the store for two days, achieving sales of about 3.9 million yen.



Lively atmosphere at “Miyasho Department Store.”

Every year the students have tried new projects such as a regional delivery, automobile sales, a branch store in the local shopping mall, and an advertisement on an FM radio channel. The people in Miyako City have high hopes for the “Miyasho Department Store” as a local community development program by young people.

Mizusawa Commercial High School Develops and Sells Original Products at “Gozaencha House”

Mizusawa Commercial High School has operated the pilot shop “Gozaencha House” since 1999. The teachers and students on the business course became shareholders and established a mock company called “Gozaencha Project” in 2014. Every year, second-year students in the business course take part in the purchase of goods, sales, customer services, inventory, and settlement of accounts. With the support of the local shopping mall, in recent years, they have opened “Gozaencha House” for five days in autumn in the mall. Not only the students of Mizusawa Commercial High School take part in “Gozaencha House”; the students of Maesawa Meiho Support School, Morioka

onsite sales training 販売実習 mock 模擬の stock 株 purchase 仕入れ merchandise control 商品管理
accounting 経理 public relations 広報活動 the general meeting of stockholders 株主総会
pilot shop アンテナショップ、チャレンジショップ inventory 棚卸

Commercial High School and Kamaishi Commercial and Technical High School also set up their stores there. Junior high school students also sell goods at some shops to gain work experience.

Mizusawa Commercial High School has developed original food products such as the canola oil “Nanosachi” and the popular sweets “Komencier.” In 2019, they developed and sold a new original food product called “Saba-P.” It is a variation of the Japanese traditional dish “miso-simmered mackerel,” where the miso for “Saba-P” is mixed with green peppers, a local specialty crop of Oshu City. The students showcased the good points of “Saba-P” saying, “It is made of Kinka-mackerel, which is soft and has few bones, so everybody can enjoy it.”



Two smiling students serving a customer



“Komencier”, a popular financier cake made from rice flour

Morioka Commercial High School Contributes to the Community with “Morisho Mart”

Morioka Commercial High School runs the “Morisho Mart” in autumn every year as an onsite sales training exercise. About 80 second-year students in the distribution business course negotiate with suppliers to hold the event, experiencing all the steps in the process such as the purchase of goods, pricing, sales, and inventory control.



The PR poster for “Morisho Mart”

They also run the “Morisho Mart” on a large scale at Morioka Station in March, conducting market research and selecting goods. On top of this, they purchase products grown and made by the students of agricultural high schools in Iwate, such as milk, flowers, and apple juice, and sell them at “Morisho Mart” together with the students who produced them. So far, the amount of sales have reached about one million yen over two days.

In January 2019, they experienced onsite sales training at a supermarket in Tokyo for the first time. The students experienced a wide range of activities, selling not only famous sweets and local specialties from Iwate as part of PR activities, but also selling a range of specialty products from all over Japan, original products of which they outsourced the development, and Dorayaki pancakes with the brand of the school emblem stamped.

Students' comments about the onsite sales training in Tokyo

- The best sellers were Dorayaki pancakes and Oshu sweet potato cakes! Both were sold out.
- I found it difficult to shout in a loud voice.
- I enjoyed it a lot because there were many customers in Tokyo.
- I could not answer some questions about the products. I need to study more.



Students selling products in Tokyo for the first time

canola oilなたね油 miso-simmered mackerel サバの味噌煮 local specialty 地域の特産品
Kinka-mackerel 金華サバ pricing 価格設定 inventory control 在庫管理

18 Nishiwaga High School and the “Planning 100 Years of Life Program”

In 2017 Nishiwaga High School started the “Planning 100 Years of Life Program”, which aims to teach students to plan their futures. With the cooperation of the local community, the initiative has continued to develop with each passing year.

Taking on the Challenge of Regional Revitalization with the Power of Young People



The students listened to many lectures in 2017.

① 2017 Academic year: a focus on lectures

In the first year of the activity, Nishiwaga High School had a focus on lectures. Students participated in lectures given by the mayor of Nishiwaga and others such as “the Current Situation of Nishiwaga,” “Medical Care and Welfare of Nishiwaga,” and “the Possibility of Regional Revitalization”. They also thought it necessary to incorporate some physical activities, holding the “Sports Festival in the Snow” in cooperation with the students from Iwate University in January 2018. As a result, Nishiwaga High School received an award from the Minister of Education, Culture, Sports, Science and Technology.

② 2018 academic year: suggesting plans for regional revitalization

They had four meetings with town officials on “Regional Revitalization” and formulated plans to rejuvenate the community based on the town’s situation. These plans were presented to students and executive officials, including the mayor, in February and March 2019. The suggested plans included “Revitalize Nishiwaga with products that use the Japanese mountain vegetable, *warabi*.” Additionally, ideas like “Collect points for health and happiness” and “Promote Nishiwaga’s appeal to attract newcomers” were proposed. Executive officials were pleased stating, “It’s exciting to exchange ideas with high school students.”



A presentation to the executive officials

③ 2019 Academic year: hearing from the seniors of life

In 2019, high school students launched the “Life Stories Interview” project, engaging elderly individuals in conversations about their life experiences. Initially worried



Interviewing elderly people in the local community

about limited responses, both students and seniors were pleasantly surprised. Seniors spoke extensively, leaving students amazed. The interviewed seniors expressed great joy. Through these interviews, students gained insights into the rich histories, joys, and challenges that shape individuals' lives.

19 Protecting Lives from Tsunamis with “Sakura Line 311”

In the Great East Japan Earthquake, a 15-meter tsunami hit Rikuzentakata City and caused great damage. To memorialize and prevent future tragedies, residents planted cherry blossoms along the tsunami’s reach, creating the “Sakura Line 311” project.

Planting 17,000 Cherry Blossom Trees Along a 170 km Line.

The cherry blossoms, which were planted for the first event, in full bloom



Many volunteers gathered at the planting event.

Connecting the points where the tsunami reached in Rikuzentakata City forms a line of approximately 170 km. The “Sakura Line 311” project aims to plant cherry blossom trees along this 170 km line, spacing them 10 meters apart, creating a line of 17,000 cherry blossom trees. Starting in November 2011, locals, realizing the lessons from past tsunamis in the Meiji and Showa eras, hoped to prevent similar tragedies. They felt a deep sense of frustration, wishing those lessons should have been used to avoid devastation. The annual cherry blossom planting is a touching way to remember, as these delicate trees bloom in spring. With the help of volunteers and companies, about 1,700 trees were planted by 2020.

Local Students Also Participate in Tree Planting

Those supporting “Sakura Line 311” are not only adults but also elementary, junior high, and high school students who participate in tree-planting activities. Otomo Elementary School and Yonesaki Elementary School in Rikuzentakata hold regular tree-planting ceremonies as a graduation memorial. Additionally, schools such as Sakuramachi Junior High School in Ichinoseki, Sumita High School, Takata High School, Toryo High School, and Daito High School also engage in tree-planting activities.



The students of Daito High School participated in planting.

“Sakura Line 311” was registered as a nonprofit corporation in April 2012. Since then, its operations have expanded outside of planting cherry blossom trees, conducting public awareness activities about disaster prevention/mitigation.

Mr. Okamoto Shoma, the representative, expressed, “By nurturing cherry trees, we want to pass down the tragedy of the tsunami to future generations. If you can escape beyond the cherry trees, you can surely be saved.”



Mr. Okamoto Shoma speaking at Toryo High School

20 Ichinohe High School Nurtures the Power to Live through Interaction with the People in the Coastal Area

Ichinohe High School has interacted with the people in the affected coastal area since the Great East Japan Earthquake struck. They have been in especially close contact with Noda Village and Tanohata Village, fostering a friendly relationship.

“Live” for the First-Year, “Involve” for the Second-Year, and “Prepare” for the Third Year

The general course of Ichinohe High School teaches the Iwate Reconstruction Program. There are three themes, each for a particular grade. They are: “Live” for first-year students, “Involve” for second-year students, and “Prepare” for third-year students.

The first-year students visit Tanohata Village, one of the affected areas, to hear from people living there about how they felt when the earthquake struck, how their lives are now, and how they are reconstructing the village. The students take a train on the Sanriku Railway and directly see the affected areas with their own eyes. They learn how terrifying a tsunami is, how to judge when a disaster occurs and how important lives are. They also learn to understand the feelings of other people.

The second-year students become involved in “The Get-Together to Support Reconstruction in Noda Village.” It started when the students of Ichinohe High School conducted reconstruction support activities such as removing the rubble and installing flower planters in Noda Village in 2011. Inspired by seeing how the reconstruction of Noda Village was steadily progressing, the students wanted to show the people in the village that they were working as hard as possible to contribute. This is how the relations between Noda Village and Ichinohe High School started.

In the 2017 academic year, the students from the humanities and natural science course from the home economics and arts stream held workshops such as creating handicrafts, making handmade soap from honey, and bookmark-making at the get-together. They also held events such as the tasting of cookies made from miscellaneous grains and Japanese sweets and a takoyaki party. On top of this, they prepared a play area for children to dance and sing together. The students who were studying agriculture in life and culture course held a workshop on baking pizza in a portable stone oven which was



The students learning about the Great East Japan Earthquake in Tanohata Village.



The workshop on baking pizza in a stone oven



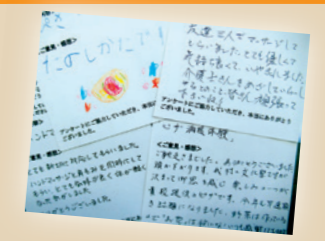
The workshops on hand care, foot bath massages

the Iwate Reconstruction Program いわたの復興教育 humanities and natural science course 人文・自然系列
home economics and art 家庭・芸術 miscellaneous grains 雑穀 play area for children キッズコーナー life
and culture course 生活・文化系列

made by the students. They used the vegetables that they grew for the pizza toppings and tomato sauce. The workshop was very popular. The students in the information and business course set up a booth to sell agricultural products, and the students in the nursing care and welfare course held workshops on hand care and foot bath massages. For the students, hearing the words of gratitude from people in Noda Village was better than anything. Seeing how people in Noda Village overcame difficulties increased their motivation to support and desire to learn. Moreover, they learned the importance of bonds between people, regional development, and social involvement.

Gratitude from Noda Village

- Thank you for visiting us every year.
- I enjoyed your visit so much that it made me forget that my house was lost to the tsunami for a while.
- I love the pizza baked in the stone oven.
- I was very moved with the original dance “Hanaichi” and strong taiko drums.



Many letters of gratitude from Noda Village

For the third-year’s education of disaster prevention on the theme “Prepare,” they participate in the lectures given by a school disaster prevention adviser. These lectures are on knowledge and skills about earthquakes, tsunamis, volcanos, weather, and how to evacuate at the time of disaster. The students learn about the risk of disasters and how to prevent disasters in the area they live. From this, they gain a deep understanding about natural disasters.

They present what they had done over the three years at the Iwate Reconstruction Program debriefing meeting and at the meeting of the Ichinohe High School integrated course. How did they feel through the activities? The comments of students in each year were as follows:

Comments from students about how they changed:

“It is important to improve our knowledge and skills so that we can calmly understand the situation and take proper action when natural disasters occur. It is also important to conduct regular evacuation drills in the community and communicate with each other regularly.” (A first-year student)

“We, all the students in this course, cooperated with one another to conduct ‘The Get-Together to Support Reconstruction in Noda Village.’ After the meeting, we received many heartfelt letters from the people in Noda Village and realized our activities were helpful to them. We were able to work together with Kuji Higashi High School with the same goal in mind, and we have become ‘connected’ with many people.” (A second-year student)

“It is important to have chances to talk about disasters with as many people as possible and to share the knowledge and skills so that everybody can act properly in case of an emergency.” (A third-year student)

Through the activities over the three years, some students decided to enter schools where they can learn more knowledge and skills about disaster prevention after graduation. Through the activities of the Iwate Reconstruction Program, it is anticipated that the students, together with the local people, raise their awareness of disaster prevention and go on to protect precious lives.

information and business course 情報ビジネス系列 nursing care and welfare course 介護・福祉系列 regional
development 地域づくり social involvement 社会参画 debriefing meeting 報告会 as many people as
possible できるだけ多くの人々

21 Numakunai High School Involved in Volunteer Activities to Learn about Disaster Prevention

In the past, after a typhoon had passed, we used to see a clear sky and feel refreshed. However, typhoons have become more violent year by year, causing serious disasters, and threatening and destroying our lives. This article goes over the thoughts and endeavors of the students of Numakunai High School in their volunteering activities.

Beginning with 3 Student Volunteers

On August 30, 2016, Typhoon No.10, which took an irregular course over waters to the south of Japan, made landfall around Ofunato City. In the aftermath, three members of the student council leadership of Numakunai High School visited Iwaizumi Town, which was affected by the typhoon, and removed mud from houses as volunteers. At the general meeting of the student council, they talked about how they worked there, which led to more students doing volunteer work there in the following year.

One of the members of the student council leadership said, "Rooms in houses were filled with earth and sand, and it was harder to remove them than we had imagined. There still remain some areas where the roads and bridges have not been restored, and the whole school should come together to do volunteer work if a natural disaster causes extensive damage."

After all the students participated in volunteer activities, they understood the reality of the affected areas and became more aware of disaster prevention. It also made them become even more motivated to work together as volunteers because they saw the affected area with their own eyes, in a way they could not have known only from news and other media. The principal of Numakunai High School (at that time) was looking forward to their future activities, saying, "There are many things we cannot understand unless we go to the place where they happened. I hope these activities raise their awareness of disaster prevention."

On July 1, 2018, about 40 second-year students weeded around the Nakano Temporary Housing Units which stood in the center of Iwaizumi Town. One student said, "Just looking at the photos, we can understand it is a tough situation for them as they lost their houses and precious items. I want to help such affected people even if it's just a little."



Three students worked as volunteers removing earth and sand.



Students of Numakunai High School working together to weed around the temporary units

Making Public Housing for Disaster Victims Comfortable

In July 2, 2019, third-year students of Numakunai High School made a flower bed around the public housing for disaster victims in Morioka City. They pulled up the weeds for the flower garden on the site and spread walnut shells all over to prevent dust and weeds. The walnut shells act like a natural mulch, preventing soil from drying. It is also said to be a good substitute for soil. The bags of walnut shells were heavy; students who had the physical strength carried them and spread them over the garden. They also removed about 150 illegally parked bicycles. They worked very hard to make the public housing for disaster victims comfortable. People living there said with delight, "They are helpful as they are young and have lots of energy. They are also very honest children. I am looking forward to their future."



Students spreading the walnut shells all over the flower garden

Learning from the Damage Caused by Tsunamis in Taro Town of Miyako City

The town of Taro has experienced tsunamis throughout its history. Among these, the tsunami that occurred during the Keicho Sanriku Earthquake in the early Edo period and the tsunamis in both the Meiji period and Showa period caused serious damage. Due to these experiences, they built a long and massive breakwater called "the Great Wall of Japan." However, the tsunami brought by the Great East Japan Earthquake flowed over this breakwater and hit Taro Town. Today, the ruins of the Taro Sightseeing Hotel stand there. On July 2, 2019, first-year students of Numakunai High School visited the former Taro Sightseeing Hotel and met with the people who spoke about their experiences during the earthquake.

One of the speakers talked about being saved because they noticed the tsunami while driving and evacuated to higher ground. The students learned the lesson that it is important to evacuate to higher places rather than further places.



Taro Sightseeing Hotel remains as a ruin of the Great East Japan Earthquake.



The students hearing the disaster experience from one of the speakers

22 Snow Busters Activities in Nishiwaga by Miyako Fisheries High School

Miyako Fisheries High School and Nishiwaga High School have had relations since 2000. Every winter, the students of Miyako Fisheries High School visit Nishiwaga Town and experience a life surrounded by snow.

Snow Buster Activities in Nishiwaga Town

In the 2019 academic year, Miyako Fisheries High School students visited Nishiwaga Town on January 21 and 22, encountering deep snow for the first time. They explored forests wearing snowshoes on the first day, observing icicles.

The following day, students engaged in the Snow Busters activity. They began clearing snow from the homes of individuals living alone. Despite having less snow than usual, it took time to remove the snow, which had piled up enough to cover first-floor windows. They could only remove the snow from just two houses in the morning. One student said, “I thought the snow would be fluffy, but it was quite heavy.”



The students participating in Snow Busters Activities

Neighbors visited to observe the activity and treated the students to tea and snacks, saying, “We could come here due to less snow than usual this year.” They also said, “It feels like our grandchildren are visiting us.” Normally, the Social Welfare Council arranges snow removal but sometimes people may have to wait for two to three months. Neighbors enjoyed a conversation with the students and appreciated the visit.

Diving and Fishing for Squid in Miyako City in Summer

In July 2019, Nishiwaga High School students were invited by Miyako Fisheries High School to visit Miyako City in appreciation of their winter exchange. They had their first scuba diving experience and stayed overnight on the training ship “Kaisho,” where they learned about the East Japan Great Earthquake through videos

of demolishing the former Miyako City Hall, which was damaged by the disaster. The students also enjoyed eating a squid caught by Miyako Fisheries High School’s first-year students. Nishiwaga and Miyako Fisheries, with diverse characteristics such as inland or coastal locations, and regular or specialized high school statuses, cherish this interaction as a valuable experience.



Commemorative picture in front of “Kaisho”

23 Fukuoka High School's Regional Revitalization “Cassiopeia” Class A Collaboration With High Schools, Universities, Governments, and Businesses

Since the academic year 2017, Fukuoka High School has conducted a program to nurture “glocal” talent called the Regional Revitalization “Cassiopeia” Class in cooperation with other high schools, universities, the local government, and private companies.

Learning systematically in the program for three years

The term “Glocal,” blending “global” and “local,” means “thinking globally, acting locally.” Fukuoka High School started the “Regional Revitalization Cassiopeia Class” to help students gain knowledge and practical skills for success in both local and global contexts.

First Year: Learn about Ninohe City and think about career paths.

Second Year: Choose courses such as “Tourism” and “Regional Economy” for individual research. Participate in optional on-site investigation or internships during summer break.

Third year: Use past explorations to plan future careers or academic paths after graduation.

Overseas Training Program

① First-year students conduct fieldwork in Taiwan

Starting from the academic year 2018, first-year students transitioned from the traditional second-year school trip to Kansai to engaging in field studies in Taiwan as part of the Cassiopeia Class. Students shared their impressions, suggesting that while Taiwan excels in attracting tourists, Ninohe’s exceptional natural environment could also be appealing.



The “Cassiopeia” Class for all the first-year students



The second-year students attending a “sightseeing course”



The first-year students’ fieldwork in Taiwan

② Second-year students present research in Vietnam

Since the academic year 2018, second-year students have participated in a research presentation in Vietnam. Approximately 10 selected students presented their Cassiopeia Class explorations in English to students in Dong Nai, Vietnam. They found the experience unique, noting that the vibrant and enjoyable atmosphere of developing Vietnam stands out compared to Japan or Ninohe.



The second-year students’ speech at the research presentation in Vietnam

24 The High School Students Who Inherit and Develop Traditional Culture

Recently, the number of successors of Japanese traditional culture has been decreasing and some of those cultures have become lost. This article shows you the students who inherit and try to develop each traditional culture.

Ohasama High School Students Inherit Otsugunai-kagura

Hayachine-kagura, the general term for Take-kagura and Otsugunai-kagura, has a history of more than 500 years and was registered as a UNESCO Intangible Cultural Heritage in 2009. The Kagura group of the Ohasama High School culture club practices hard to master Otsugunai-kagura.

Despite the fact that only one student participated when the club's activities started in January 2016, the number of students participating gradually increased. In April 2017, these students became pupils or trainees of the Otsugunai-kagura Preservation Society and were allowed to use the name "Ohasama High School Kagura, Otsugunai School of Hayachine-kagura".

Having a training room in the school, they receive guidance of the Otsugunai-kagura Preservation Society twice a month and perform their kagura at the school festival, folk performing arts festivals, and other events, while being supported by the local people. One of the members said with enthusiasm, "I feel nervous when I'm standing on the traditional stage. I will continue to practice hard to make my performance more refined."



A student receiving guidance on Otsugunai-kagura

Hanamaki Agricultural High School Students Inherit the Ochiai Shishi Odori (Deer Dance) of the Kasuga School

The history of the Ochiai Shishi Odori (Deer Dance) of the Kasuga School dates back to 951. Eight deer were playing around the home of the holy priest Kuya, but a hunter killed one of them. It is said that holy priest Kuya started this dance to comfort the spirit of the deer.

A memorial monument of the deer dance stands in the Ochiai area of Towa Town. The dance begins by holding a memorial service for the deer, with prayers for a rich harvest and world peace.

The deer dance club of Hanamaki Agricultural High School passes down the Ochiai Shishi Odori of the Kasuga School, which has a history of more than 1,000 years. The club was established in 1958. The club started off with some volunteers practicing the deer dance to take part in a recreation performance, becoming a club activity over time. In 2019, 26 members practiced six times a week and were asked to appear in some events about two to three times a month.

Ochiai Shishi Odori of the Kasuga School is a dance in which performers carry a "sasara" (bamboo whisk) on their backs, wear heavy clothes, beat a drum, and sing and dance intensely, lowering their center of balance and shaking their heads. As it not only requires

skills but also physical strength, they run and do strength training and vocal exercises before they practice dancing.

The club places great importance on establishing bonds with people. This includes bonds with ancestors, one's seniors, friends, teachers, local people, people from other regions and other countries, and the people who will inherit the dance in the future.

Kitakami Shonan High School Students Inherit the Iwasaki Onikenbai dance

Onikenbai dance is a traditional performing art that has been passed down in the Kitakami area over the last 1,300 years. It is a bold dance with steps called "henbai" to expel evil spirits from the land and to pray for rich harvests and world peace. The students of Kitakami Shonan High School pass down the Iwasaki Onikenbai dance, which is a nationally designated Important Intangible Folk Cultural Property.

In 2004, Kurosawajiri Minami High School was renamed Kitakami Shonan High School and it moved to where Kitakami Agricultural High School used to stand. The club first began when they inherited the Onikenbai dance from Kitakami Agricultural High School. At first, the club members were only one boy and one girl, but about ten students entered the club every year and now about 80 members belong to the club.

The Onikenbai club of Kitakami Shonan High School has made brilliant achievements, receiving the Grand Award and the Minister of Education, Culture, Sports, Science and Technology Award in the folk performing arts category of the All Japan High School Culture Festival. However, their goal is not only achieving good results. They are also involved in various activities as described below.

① Visiting welfare facilities for the elderly

They make plans and visit about ten welfare facilities for the elderly around the Kitakami and Hanamaki regions every year. When the club members see the delight on the faces of the audience from their performances, it brings tears to their eyes and a feeling that their performance had been rewarding and fulfilling.

② Continuing restoration support activities

The Onikenbai dance was originally intended to calm souls of the departed. Taking part in various support activities, the members strongly hope they can prevent the memory of the Great East Japan Earthquake from fading away and continue their activities to support areas affected by the tsunami.

③ Promoting Onikenbai all over Japan

The club members consider local performing arts to be a way to attract tourism and revitalize the community. They not only perform in many events in and outside the prefecture, but also take the initiative to help prepare events and work at the reception counters for these events. They also take part in other school's culture festivals and art festivals. Seeing the various activities of students from other schools gives them the energy and motivation to pass down their traditional dances.



Hanamaki Agricultural High School received the Grand Award and the Minister of Education, Culture, Sports, Science and Technology Award in the folk performing arts category of the 42nd All Japan High School Culture Festival held in Nagano Prefecture in August 2018.



Onikenbai club members of Kitakami Shonan High School performing their dashing dance

a nationally designated Important Intangible Folk Cultural Property 国指定重要無形民俗文化財 rewarding and fulfilling やりがいと生きがい

inherit ~を受け継ぐ successor 後継者 UNESCO Intangible Cultural Heritage ユネスコ無形文化遺産
pupil 弟子 Otsugunai-kagura Preservation Society 大償神楽保存会 folk performing arts 郷土芸能 holy
priest Kuya 空也上人 Ochiai area of Towa Town 東和町落合 rich harvest 五穀豊穡 world peace 天下泰平

25 Home Economics Club of Tairadate High School Contributes to the Local Community with Shikonzome Dyeing

The home economics club of Tairadate High School consists of all the first-year students of the general course who take basic home economics and first-year to third-year home economics students. They research Shikonzome dyeing using a perennial plant of the mint family called purple gromwell, make pillows annually to give as gifts for the respect-for-the-aged associations in Hachimantai City, and conduct travelling classes about Shikonzome dyeing to the public and elementary students.

Handmade Pillows as Gifts

The students of Tairadate High School have made “Shikun Pillows” for the local elderly people for more than 55 years. This started when the students began research to design a pillow for sleeping well as part of a club activity in 1964.



The handover ceremony of “Shikun Pillows”

Usually, pillows contain mostly buckwheat husks, however, they make “Shikun Pillows” by adding a few purple gromwell roots. Since ancient times, purple gromwell roots have been known for their anti-inflammatory, detoxifying, and antipyretic properties.

The students said with hope, “This pillow was made after repeated trials and errors. We want the elderly to have comfortable sleep so that they can relieve their fatigue.” Every year, the respect-for-the-aged associations of each area hand out these pillows to citizens who are 89 years old, as this special year is called “Sotsuju” in Japanese.

“Shikun Pillows” Continues Evolving

“Shikun Pillows,” given to the elderly as anniversary gifts every year, have continued to improve over the years.

In 2019, the students made a pillow that was 30 centimeters wide, 50 centimeters long, and 6 centimeters high, which was bigger than former pillows by 5 centimeters in length and 8 centimeters in width. They made them after they conducted interviews with bedding suppliers and researched the optimal pillow size that would prevent people’s heads from slipping off when they turned over. To stabilize the position of the head, they made a small crater that was 3 centimeters in width and 1 centimeter in length in the center of pillow. Moreover, they removed 4 stitches on each corner



“Shikun Pillow”

Shikonzome Dyeing	紫根染	purple gromwell	ムラサキ	perennial plant	多年草	mint family	シソ科
buckwheat husk	そば殻	purple gromwell root	紫根	anti-inflammatory	消炎作用がある		
detoxifying	解毒作用がある	antipyretic	解熱作用がある	fatigue	疲れ	bedding supplier	寝具店

and redesigned the shape to avoid making a space between the pillow and a person’s shoulders, which improved the fit and simplified the production process.

Promotion Activities to Pass Down the Tradition

Every year, the students of Tairadate High School visit elementary schools in the city and conduct classes on Shikonzome dyeing. Children made their own patterns on the silk handkerchiefs to dye. The way of “tie-dyeing,” is to band fabric with any objects at hand such as disposable chopsticks, rubber bands, marbles, zip-ties and clothes pins. This creates a white pattern on the fabric which is different every time. Seeing their own original handkerchiefs, one student said with her eyes shining, “Although it was very hard to repeat the same action, I was able to make interesting shapes. I am happy that I could make a nice original pattern.”



Teaching a class at an elementary school

They also hold workshops on Shikonzome dyeing that are open to the public. People from in and outside of the city learn how to do Shikonzome dyeing from the home economics students using purple gromwell roots, and they are able to make Shikonzome dyeing handkerchiefs.

Trying to Reproduce the Purple Color Haru-san Made!

Ms. Sawaguchi Haru, who taught the students of Tairadate High School the technique of Shikonzome dyeing, fell ill in 2015 and it became impossible to receive her guidance. Every year, first-year and second-year students dye corsages for graduates, but after Ms. Sawaguchi fell ill, the students felt they could not dye corsages with the same deep purple they used to.

However, they did not give up. “We want to reproduce the purple that Haru-san made!”

They conducted interviews with people knowledgeable on how to grow purple gromwell, color fixing, and dyeing. They also conducted many experiments on liquid concentration, temperature, number of dyeing times, and the differences of materials. The students now put in their efforts to hand down the knowledge and techniques Ms. Sawaguchi taught them, as well as her love for Shikonzome dyeing, to future generations.



Ms. Sawaguchi (left side of the picture) guiding the students



The students received the Hyogo Prefectural Board of Education Award at the 67th All Japan High School Home Economics Club Research Presentation Conference.

stitch	縫い目	marble	ビー玉	zip-tie	結束バンド	color fixing	媒染	liquid concentration	液体濃度
All Japan High School Home Economics Club Research Presentation Conference 全国高等学校家庭クラブ研究発表大会									

26 Morioka Daini High School's Reconstruction Support Activities to Make Their Sentiments Reality

Morioka Daini High School organized their first reconstruction support activity “Let’s send Christmas Trees to temporary housing units!” in the December of the year that the Great East Japan Earthquake struck. This article shows you a timeline of their unique activities.

Visiting Affected Areas to Conduct Support Activities

Morioka Daini High School has visited the affected areas and conducted reconstruction support activities there since 2012. In August, 18 members of the flower arrangement club visited Miyako City, and 37 members of the flower arrangement club and the Naginata (pole sword) club visited Otsuchi Town to communicate directly with people affected by the disaster. In December, they had further exchanges with those affected by the disaster, showed their Naginata performance, and took part in “Otsuchi Town’s Canola Flower Project.”

After 2013, they continued to visit affected areas including Otsuchi Town and Miyako City for more exchanges. On January 11, 2015, 51 students divided into three groups, visited the temporary housing units in Taro, Miyako City. They made elaborate preparations with all the students making paper cranes and adding their messages. The students who could not visit Taro made handmade soap and cookies and sent them with the students visiting Taro.



Students with the paper cranes prior to visiting Taro

Otsuchi Town’s Canola Flower Project

Mr. Kanayama Fumizo, one of the people affected by the Great East Japan Earthquake, started this project to put the smiles back on the faces of the residents of Otsuchi Town. The goal of the project was to clean the riverbed of Otsuchi Town and grow canola flowers. Mr. Kanayama gave the canola flower seeds to the students of Morioka Daini High School and they grew the flowers.



Students sowing the seeds of canola flowers

The members of the track and field club and soft tennis club formed the music group “Reconstruction Handbells” and practiced playing under the guidance of the members of the brass band club. The students visited three temporary housing units in Taro, handed out gifts, drank tea together, and played the handbells in front of the people living there. They also visited all the houses of the people who could not go to the venue and handed out gifts. The students were able

Canola Flower 菜の花 make elaborate preparations 入念な準備をする riverbed 河川敷 sow ~をまく pray silently 黙とうをささげる



Students baking about 400 cookies



Students playing the handbells



Students visiting each and every house, with residents enjoying their visit

to see a lot of bright smiles of the people they were visiting.

On the way home, they met with the student council of Miyako Kita High School at Miyako Station and donated part of the earnings of their culture festival to the school. They also gave the same number of paper cranes connected with strings as the number of Miyako Kita High School students. They also prayed silently together at 2:46 pm as it was the memorial day of those who passed away in the Great East Japan Earthquake.

First-year Students Learn About the Affected Areas

Ever since Morioka Daini High School was designated as a disaster prevention school in Iwate Prefecture in 2015, first-year students have travelled to learn about the affected areas. On October 30, 2018, they visited Rikuzentakata, bringing their handmade flower-shaped candles, which members of the flower arrangement club had been sending to the affected areas since the Great East Japan Earthquake occurred.

It began when one of the members suggested they make flower-shaped candles to soothe the hearts of the people of Rikuzentakata when they think of those dearest to them and when they think of reconstruction, and to give them courage. All the flower arrangement club members ultimately made flower-shaped candles with soft pastel colors after a process of trial and error. The volunteer members who were first-year students then made flower-shaped candles and delivered them to the people of Rikuzentakata. There, they saw the reality of Rikuzentakata, the progress of reconstruction, and the lone pine tree. They also weeded Takatamatsubara beach where pine trees are now planted. When the debriefing session was held, they said with determination, “We should hand down what we learned at the affected areas.”



The students making flower-shaped candles



The report used in the debriefing session



First-year students weeding at Takatamatsubara

27 Kamaishi High School's Activities to Pass Down the Memory of the Earthquake

On March 11, 2019, Kamaishi City established the "Kamaishi City Disaster Prevention Citizen Charter," focusing on the principles of "prepare," "evacuate," "not return," and "pass on" to protect lives. The city also introduced a certification system for "transmitters" who share lessons from disaster experiences and recovery efforts. Kamaishi High School actively participates in these preservation activities.

Training Successors

In June 2019, Kamaishi City recruited "Great East Japan Earthquake Kamaishi Transmitters" to pass on lessons to the next generation. A training session on self-improvement and transmission methods was held on the 29th. It covered lessons from



The first basic training of "Kamaishi's Successors of the Great Earthquake" (Photo by Kamaishi Newspaper)

the "Kamaishi City Disaster Prevention Citizen Charter" and insights into earthquake mechanisms and the characteristics of tsunami damage along the Sanriku coast. Mr. Saito Tokumi, emeritus professor at Iwate University also Kamaishi City's disaster advisor, expressed expectations for transmitters, stating, "Protecting lives in the next era is our responsibility." Participants received a "Transmitter Certificate" from Mayor Noda Takenori after the training.

Kamaishi High School's Activities to Pass Down Lessons Learned from the Earthquake



Ms. Noro Ayaka conducting a lesson at her old elementary school

Twenty-seven participants, ranging from high school students to those in their 80s, attended the training for disaster transmitters. Among them were 3rd-year students from Kamaishi High School, Ms. Sasaki Yukime and Ms. Noro Ayaka. Ms. Sasaki, who experienced the earthquake as a 3rd grader in elementary school, emphasized the importance of personal judgment and evacuation to higher ground based on her own experience. Ms. Noro, also a 3rd grader during the earthquake, was inspired to launch a project conducting outreach lessons for

the "Kamaishi City Disaster Prevention Citizen Charter" 釜石市防災市民憲章 one's alma mater 母校

inland elementary students. In her second year of high school, she conducted disaster preparedness classes for fourth graders at her alma mater, Kassi Elementary School, covering topics such as understanding Kamaishi, tsunami mechanisms, evacuation methods, and fostering love for Kamaishi.

On August 19, 2018, Ms. Horaguchi Rui made the kick-off speech at the game commemorating the completion of the Kamaishi Unosumai Memorial Stadium. She is another successor. Ms. Horaguchi was affected by the earthquake when she was a third-year student and her school and house were washed away. The memorial stadium was built on the former grounds of the elementary school and junior high school, which were completely destroyed. She appreciated the support from all over Japan and overseas when she was living in an evacuation center, and started the project using social media to show gratitude in being able to regain her ordinary life. Many people were moved to hear her kick-off speech, which began with the phrase "I love Kamaishi."

Passing On Lessons at the Rugby World Cup

During the Rugby World Cup match on September 25, 2019, Ms. Sasaki, Ms. Noro, and Ms. Horaguchi presented in Japanese and English, receiving positive feedback that highlighted the importance of persistently sharing disaster experiences and improving awareness. Additionally, Kamaishi High School 2nd-year students, including Ms. Nakamura Nozomi and Ms. Ota Yume, distributed 2,000 self-produced tsunami preservation fans with Japanese and English tsunami-related information, aiming to leave a lasting impact and convey their message internationally. They plan to continue distribution at future events.



Ms. Sasaki Yukime passing down the lessons of the earthquake



Ms. Horaguchi Rui passing down the lessons of the earthquake

Volunteer Members Forming the New "One Team" Association

Ms. Ota Yume and fellow students established the "One Team" group on January 25, 2020, dedicated to preserving earthquake memories. Engaging in various activities, including those during the 2019 Rugby World Cup, they recognized the importance of continuous efforts in transmitting memories. After receiving 31 applications from a call within the school, the group named "Yume-dan ~ Succeeding to the Future, ONE TEAM," operates through four teams: "Preparation Team," "Creation Team," "Informing Team," and "Connection Team," fostering collective engagement in their mission.

28 Iwate Tsunami Memorial Museum Shows What Each of Us Can Do

In September 2019, the Iwate Tsunami Memorial Museum was opened in Rikuzentakata City to let people inside and outside Japan know the facts and lessons about the tsunami following the Great East Japan Earthquake.



Zone 1 Tracing history



Zone 2 Learning the facts



Zone 3 Learning lessons



Zone 4 Moving towards reconstruction together

Picture-Story Cards— “Tsunami”

In the section “Creating the Future” of zones three and four, you can see large picture-story cards (kamishibai in Japanese) entitled “Tsunami,” which were drawn 40 years ago by a woman who experienced the Showa Sanriku Earthquake Tsunami in 1933. She had told with these cards how terrible the tsunami was, how important disaster prevention was, and how to live with nature to the local children and students on field trips over and over again before the Great East Japan Earthquake occurred. These picture-story cards will make you feel her wishes that nobody has the same experience as her by passing down her story of the tsunami to the future generations.

Learning Lessons

- **Action to save our lives:** A lot of panels show you how the local fire brigades, construction companies, and the Japan Self-Defense Forces worked soon after the disaster occurred.
- **Evacuation to survive:** According to an investigation result concerning the evacuation actions, most people answered as their reason for evacuating soon

Iwate Tsunami Memorial Museum 東日本大震災津波伝承館 いわて TSUNAMI メモリアル Showa Sanriku Earthquake Tsunami 昭和三陸地震津波 fire brigades 消防団 the Japan Self-Defense Forces 自衛隊

The Japanese Archipelago is one of the places on Earth most threatened by natural disasters, and we who spent many years living in this land have built up a strong will to defy these dangers.

Despite this, in the wake of the March 2011 Great East Japan Earthquake and Tsunami, we suffered an immense loss of life.

In order to avoid repeating this sorrow, it is of utmost importance that we possess the knowledge, wisdom, and motivation to protect ourselves against various natural disasters, and thus become able to overcome them.

The Iwate Tsunami Memorial Museum will share the wisdom of our predecessors, the reality of the Great East Japan Earthquake and Tsunami, and the lessons we’ve learned with the world to become a society that is strong in the face of natural disasters.

In addition, as part of our efforts in overcoming the Great East Japan Earthquake and Tsunami, we’d like to show our gratitude for the support we have received.

Mission Statement of the Iwate Tsunami Memorial Museum

after the earthquake occurred, “I thought the tsunami would come soon due to the huge shaking,” which shows us they usually had high awareness of tsunamis. The second most common answers were “My family and neighbors told me to evacuate” and “I saw my neighbors evacuate,” which indicate that local people’s advice about evacuation and their initiative actions became a major motivation in encouraging other people to evacuate. However, the results also revealed some problems, including the fact that 40% of people did not evacuate soon after the shaking stopped.

Each of Us Does What We Can Do

The clerk of the museum says, “We want people to think of the tsunami following the Great East Japan Earthquake not as what happened in the past but as the lessons of preparing for a natural disaster that will happen for the future.”

We cannot tell when and where a natural disaster happens. When you are a high school student and you will become a university student or a working adult, each of you has something you can do, for example, an evacuation guide, rescue operation work, reconstruction of local community work, volunteering, emergency training, and transmission activities, and so on.

The movie of zones three and four was closed with the sentence, “Our individual actions can create our future.”



School supplies which the tsunami washed over and were found in the mud: (from the left) ①a volleyball, ②a microscope, ③a science reference book, ④a keyboard harmonica and ⑤a trumpet. (The items ①-③ were used until the earthquake occurred in Kesen Junior High School in Rikuzentakata City, ④ in Unosumai Elementary School in Kamaishi City and ⑤ in Kamaishi Higashi Junior High School in Kamaishi City.)

immense 非常に大きな of utmost importance 最も重要である predecessor 前任者

29 Making a Model of a Tsunami to Raise Awareness of Disaster Prevention

Miyako Commercial and Technical High School (formerly Miyako Technical High School) has an educational program in which third-year students on the Mechanical Engineering Course make a model of the tsunami as a project study and hold visiting classes on tsunami disaster prevention.



The models of tsunamis of Fujiwara and Sokei District in Miyako City

Simulating the Tsunami by the Models

A project study “tsunami model team” of third-year students on the Mechanical Engineering Course started in academic year 2005. The first model they made was of the former Miyako City before it incorporated Taro Town and Niisato Village.



Yamada Bay in Yamada Town (right)

They make three-dimensional models to cut sheets of plywood according to the contour lines, pile them up, smoothen the unevenness with paper clay, and reproduce the geographical features and height difference of the land and the bottom of the sea, where a lot of buildings and breakwaters were added. They can simulate the situation of flooding when the tsunami occurs with colored water and a wave-making device.

They work hard to ascertain the geographical features of the ground under the sea when designing the model, because they can understand only those of the land from a normal topographical map. For the first work of the former Miyako City, they could use the data of the Ports and Harbors Bureau, but without such data, they have to draw a plan while referring to nautical charts.

When making the model, they find it hard not only to finely cut sheets of plywood, but also to handle paper clay because it will unintentionally stick to the model unless

they work quickly, especially in the summer when it dries quickly. They say, however, they can improve their concentration and patience through all the processes, which greatly helps them in making things when they start working.

So far, they have made over ten models of tsunamis, which are passed down to their juniors and used in demonstration events.



The geographical features and layout of the buildings are reproduced precisely.

sheets of plywood ベニヤ板 contour line 等高線 pile up 積み上げる topographical map 地形図
Ports and Harbors Bureau 港湾局 nautical chart 海図

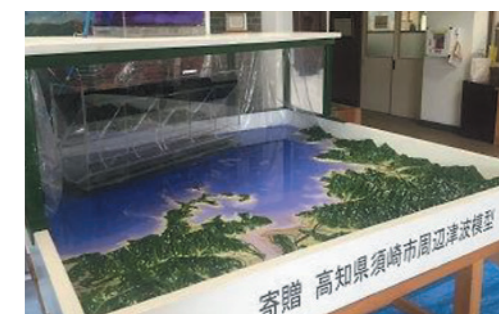
Conducting the Awareness-Raising Activities to Promote Tsunami Disaster Prevention Before the Earthquake Occurred

The students of the tsunami model team started to hold demonstrations using models of tsunamis in Takahama Elementary School in Miyako City and at the training session for welfare commissioners of Tsugaruishi District in 2006. After that, they conducted visiting lessons about tsunami disaster prevention including demonstrations at local events and neighboring elementary and junior high schools, holding 192 lessons by the end of January 2020.



The 192nd tsunami demonstration at Sokei Elementary School in Miyako City

Seeing the tsunami flowing over the breakwater and swallowing up the town, many people’s breath was taken away and they recognized the importance of the disaster prevention. Actually, the students of the team visited 15 elementary schools for demonstrations before the occurrence of the Great East Japan Earthquake and all the children in those schools survived when the tsunami occurred.



The tsunami model given to Susaki Technical High School in Kochi Prefecture

When Miyako Commercial and Technical High School interact with other schools, they conduct the demonstration with the model of tsunamis as one of the event programs to promote the idea of disaster prevention.

In 2016, they demonstrated in front of the student council of Hokkaido Kushiro Higashi High School, which was visiting to learn disaster prevention, and also demonstrated the model around Sendai Bay at the school festival of Tagajo High School in Miyagi Prefecture. They also gave a model to the school.

In 2017, they demonstrated it in front of the high school students from Kota Kinabalu District in Malaysia and Kanazawa Hakuryo High School in Ishikawa Prefecture, and visited Susaki Technical High School in Kochi Prefecture to demonstrate the model around Susaki City. They also gave a model to the school.

The tsunami model team had already been highly recognized to do an awareness-raising activity to promote tsunami disaster prevention before the earthquake occurred and received a lot of prizes. These prizes include the Grand Prix of Japan Water Prize, which is given to the individuals or organizations that conduct activities to raise awareness of improved water cycles and water disaster prevention, as well as the Prime Minister’s Commendation to Contributors for Disaster Prevention, the Bronze Prize of the Monozukuri Contest in Iwate Competition, the Iwate UNESCO Special Award for Earthquake Disaster Awareness, the Grand Prix of the Disaster Prevention Contest for Protecting the Community in Tohoku, and the Disaster Prevention Education Promotion Association’s Special Commendation.

welfare commissioner 民生委員 Kota Kinabalu District コタキナバル地区 Japan Water Prize 日本水大賞
the Prime Minister’s Commendation to Contributors for Disaster Prevention 防災功労者・内閣総理大臣表彰
Disaster Prevention Education Promotion Association 防災教育推進協会

30 Why do Many Natural Disasters Occur in the Japanese Archipelago?

Geographical Features' Relationship with Earthquakes, Tsunamis, Flood Damage, and Landslide Disasters

Relationship between Earthquake Disasters and Geographical Features

In Japan, despite comprising just 1/400th of the world's land, the energy released by earthquakes and volcanoes is roughly 1/10th of the global total. With about 75% of the country covered by mountains, where people tend to live closely, earthquakes can cause significant damage. Strong shakes can destroy buildings, as seen in the 1995 Great Hanshin-Awaji Earthquake, where around 105,000 homes collapsed, and about 80% of the deaths were from being crushed or suffocated. Mountains hit by earthquakes might also lead to landslides, rockfalls, and debris flows, causing harm, like in the 2008 Iwate-Miyagi Inland Earthquake. In areas with high groundwater, shaking can turn loose sand into liquid, affecting structures and underground utilities, as what happened in the 2011 Great East Japan Earthquake.

Relationship between Tsunami Disasters and Geographical Features

The relationship between tsunamis and landforms becomes apparent when tsunamis surge significantly higher in the inner bays of ria coastlines. This is due to the concentration of tsunami energy shaped by the geographical features of the bays. Much of Japan's plains are deposition plains created by rivers. In coastal plains affected by tsunamis, river mouths allow tsunamis to travel upstream. During the Great East Japan Earthquake, the tsunami traveled nearly 50 km upstream along the Kitakami River. It's crucial to recognize that tsunami disasters extend beyond coastal areas.

Relationship between Flood and Landslide Disasters and Geographical Features

Japan's rivers, characterized by steep gradients and short channels, are prone to floods during heavy rainfall from typhoons and other events. Approximately 10% of the country's land lies in flood-prone areas (areas lower than the river water level during floods), where about 50% of the total population and 75% of all assets are concentrated, contributing to increased flood and high-tide damage.

With around 75% of the land being mountainous and the country experiencing high annual precipitation due to the rainy season front and typhoons (ranking fourth in the world), the risk of landslides is also elevated. Since 2004, an average of over 1,000 landslides occur annually. Excluding the Hanshin-Awaji and East Japan earthquakes, more than half of the casualties from natural disasters are attributed to landslides.

debris flow 土石流 groundwater 地下水 soil liquefaction 地盤の液状化 ria coast リアス海岸
 river mouth 河口 high-tide 高潮 precipitation 降水量 rainy season front 梅雨前線

31 The Mechanisms and Damage of Natural Disasters What happened in the Great East Japan Earthquake?

The Mechanism and Damage of Earthquakes

At the Great East Japan Earthquake, earthquakes of magnitude 9 grade occurred three times consecutively, which caused the tsunami and huge damage. Why do such earthquakes occur?

① **Mechanism and types of earthquakes:** The Earth's surface is covered by about 20 large "plates," with Japan situated near four of them. These plates, driven by movements in the mantle below, gradually move several centimeters each year. Earthquakes occur when these plates push against each other, causing strain that results in plate rupture. Here are the main mechanisms and types of earthquakes:

- ① **Interplate earthquakes (Trench-type earthquakes):** Result from oceanic plate subduction, pulling continental plates and releasing accumulated strain. Example: The 2011 off the Pacific coast of Tohoku Earthquake
- ② **Oceanic intraplate earthquakes:** Occur within or near the subduction zone.
- ③ **Inland active fault earthquakes:** Common in Northeastern Japan (reverse faults) and Western Japan (strike-slip faults). Example: The 1995 Southern Hyogo Prefecture Earthquake.
- ④ **Volcanic earthquakes (swarm earthquakes):** Associated with volcanic activity, occurring in swarms and linked to volcanic processes.

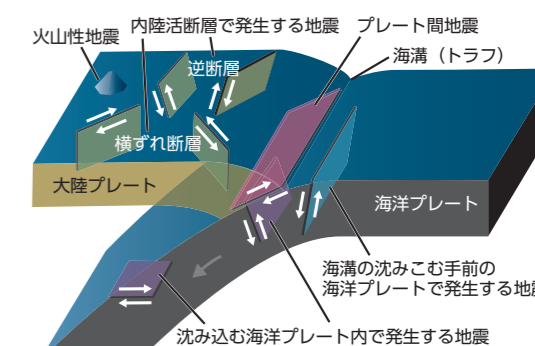
② **Damage caused by earthquakes:** The occurrence of severe earthquakes brings about the collapse of structures such as buildings, bridges, and roads, which can be caused by ground cracks, soil liquefaction, and landslides. The earthquakes also cause tsunami and fire damage. In the case of slow shaking over a long time (long-period ground motion), the earthquake spreads far from the epicenter, and severely shakes structures such as high-rise buildings and gas tanks, and causes damage.



The landslide caused by an earthquake



The distribution of plates around Japan



The kind of earthquakes occurring around Japan



The Iwate-Miyagi Nairiku Earthquake in 2008

continental plate 大陸プレート oceanic plate 海洋プレート subduction 沈み込み reverse fault 逆断層
 strike-slip fault 横ずれ断層 The 1995 Southern Hyogo Prefecture Earthquake 兵庫県南部地震
 volcanic earthquake 火山性地震 swarm earthquake 群発地震 long-period ground motion 長周期地震動
 epicenter 震源地 high-rise building 高層ビル

The 2011 off the Pacific Coast of Tohoku Earthquake

The 2011 off the Pacific Coast of Tohoku Earthquake was one that occurred between plates (subduction zone earthquakes) and the process of the fault rupture was considered to be broadly divided into the following three phases.

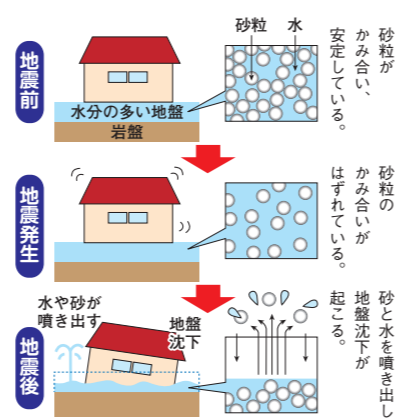
The first phase (from the occurrence of earthquake to about 40 seconds later): the first rupture occurred in the epicenter off the coast of Miyagi Prefecture, which propagated to make a large fault slip at the west side of the epicenter. The rupture depth was about 40 kilometers, with violent shaking over a short time.

The second phase (from about 40 seconds later to about 100 seconds later): several tens of meters of a large fault slip occurred around the Japan Trench, on the east side of the epicenter, with a long period of shaking and huge tsunami. The rupture propagated to the west side of the epicenter and the depth, which caused violent shaking over a short time again.

The third phase (from about 100 seconds later to about 150 seconds later): a rupture occurred off the coast of Fukushima Prefecture and off the coast of Ibaraki Prefecture. Finally, the focal area of the earthquake expanded widely, spanning about 500 kilometers south to north and about 200 kilometers east to west from the coast off Iwate Prefecture to the coast off Ibaraki Prefecture, with a depth of about five to 40 kilometers.

1 Liquefaction: An earthquake is sometimes followed by a liquefaction phenomenon on ground containing large volumes of water such as land reclaimed from the sea or the river, and the land near the coast and the river.

Usually, the grains of sand bind each other and support the watery grounds, but the strong shaking of the earthquake loosens the bonds and the water pressure between the grains increases. After that, the ground becomes like muddy water, from which the sand and water burst out. As the grounds sink due to the lack of water between the grains of sand, buildings tilt and manholes rise up.

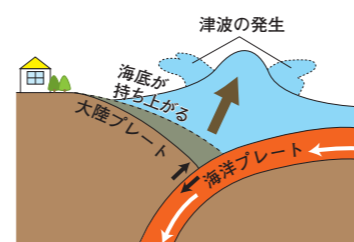


The Mechanism and Damage of Tsunamis

After the Great East Japan Earthquake occurred, the huge tsunami reached the coast of eastern Japan in about 30 minutes. Why do such tsunamis occur?

1 The mechanism of tsunamis' occurrence: When the Great East Japan Earthquake occurred, the boundaries (ocean trenches) between the North American plate and the Pacific plate could not stand the strain, the surface of the Pacific plate was peeled off, and parts of it lifted the North American plate up by about seven meters. In other words, the bottom of the sea was lifted by about seven meters, which also lifted the seawater and caused the tsunami. When it reached the indented topography of the Sanriku Coast in a concentrated manner, this increased its energy and made the tsunami so huge.

2 The difference between a wave and a tsunami: When it is windy and a high wave



fault rupture 断層破壊 fault slip 断層すべり Japan Trench 日本海溝 focal area 震源域 tilt ~を傾ける
ocean trench 海溝 North American plate 北アメリカプレート Pacific plate 太平洋プレート indented topography
入り組んだ地形

surges upon the beach, the wave does not have enough power to destroy the buildings because only the seawater near the surface travels. However, the tsunami has a great power even if it is only 50 centimeters high, because the seawater from the bottom to the surface strikes in a cluster.

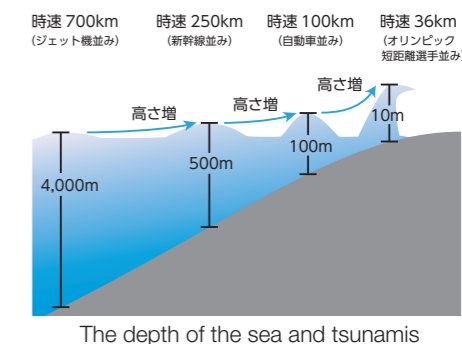
The tsunami following the Great East Japan Earthquake had the destructive power to knock over houses and trees and drag them into the sea. It is said that the per square meter power applied was up to 40 tons.

3 Damage caused by tsunamis: When a tsunami violently flows into the land, a lot of buildings are destroyed and fall down. If the buildings hit each other when the seawater recedes, many more buildings collapse and flow out into the sea. Tsunamis sometimes rush over land many times. After the first tsunami recedes, higher waves may arrive.

Tsunamis also run up rivers and a wide range of lands, mainly including lower lands, are flooded. The fields are covered with seawater, which damages crops and the salt of the seawater remain stored in the soil, making it impossible to grow crops.

The Characteristics of Tsunamis (Caused by Earthquakes)

When a fault rupture occurs under the sea bed, the geologic change of the sea bed propagates to the seawater, which causes the tsunami. When drastic destruction occurs, we feel strong shaking on the land. On the other hand, when the rupture occurs slowly, we feel little shaking, but a tsunami occurs (for example, the 1896 Sanriku earthquake). If a fault rupture occurs far from Japan, sometimes only the tsunami attacks Japan across the oceans (for example, the 2015 Chile Earthquake and Tsunami). The speed at which the tsunami propagates becomes slower as it reaches the land and when the front of the tsunami travels slowly, the following waves catch up with the front, which makes the wave higher.



The depth of the sea and tsunamis

The Mechanism and Damage of Volcanic Eruptions

In 2000, a volcanic eruption occurred on Miyake Island off the coast of Tokyo, which produced large amounts of gas for a long time. As there was a possibility of a pyroclastic flow, all the people on the island left and lived as refugees for four years and five months.

1 The mechanism of a volcanic eruption: Before the magma (hot liquid rock) in a deep part of the earth erupts above the surface of the earth, it rises to be stored in a magma reservoir and rises again to erupt.

We have many earthquakes in Japan as well as many volcanos, including 110 active volcanos, 7% of all the active volcanos in the world. (Active volcanos means the ones which have erupted for 10,000 years and are active now).



Image of a volcanic eruption



The pyroclastic flow of Mount Unzen-Fugen

surge 押し寄せる、大波 in a cluster かたまりで recede 後退する pyroclastic flow 火砕流
volcanic eruption 火山噴火 magma reservoir マグマだまり

② **Damage caused by volcanos:** When the volcano erupts, various ejecta such as magma, volcanic gas, water vapor, volcanic ash, pumice stone and volcanic bombs are spouted, which causes damage to buildings and people.

In AD 79, the Italian town of Pompei was buried with volcanic ash due to the eruption of the Mount Vesuvius in the suburbs of Naples, Italy.

The Mechanism and Damage of Typhoons

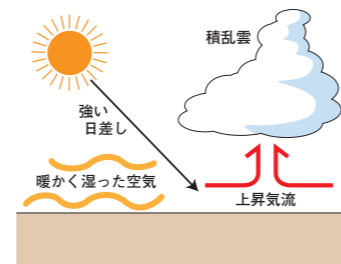
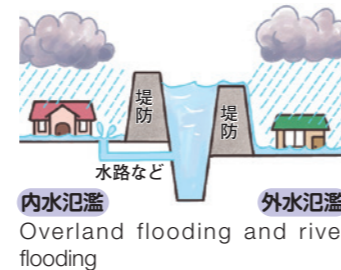
We have typhoons every year in Japan, and they have been a new threat recently. More than 100 people were dead or missing after the typhoon No. 19 formed on October 2019, and this was designated as a “severe disaster.”

① **A typhoon is a large tropical low-pressure system:** Under “low pressure,” atmospheric conditions, “tropical cyclones” can be formed in tropical waters. A typhoon is defined as a tropical cyclone formed on the Northwest Pacific Ocean or the South China Sea with a maximum wind speed that is more than 17 meters per second.

② **Damage from typhoons:** The kinds of typhoon damages are as follows: wind damages such as building destruction due to a strong wind and injuries from flying objects; water damages such as flooding of houses and overflowing of rivers; damages by a high tide; damages to ships by the surge; and landslide damages such as debris flows caused by heavy rain. Sometimes the combination of these disasters causes serious damages. When it rains heavily on plane areas, water is collected on the ground surface, causing overland flooding, to which close attention is needed especially in the urban areas.



The damage by debris flow



A cumulonimbus cloud before heavy rain

Sudden Heavy Rain, Thunder and Tornadoes

When a cumulonimbus cloud develops, heavy rain accompanied by thunder occurs, and sometimes tornadoes, which brings about huge damages.

① **The mechanism of the cumulonimbus cloud:** When warm and humid air is lit up by the sun, it rises up and is cooled in the air to become ice particles, which form clouds. The higher the humid air rises, the bigger the clouds grow, becoming cumulonimbus clouds.

② **The sign of cumulonimbus clouds:** If you find “the sky getting dark,” “a cold wind blowing” and “lightning and thundering,” These are signs that cumulonimbus clouds are approaching. When cumulonimbus clouds develop, there is a danger of sudden heavy rain, thunderbolts, and tornadoes.

③ **What to do when heavy rain, thunderbolts and tornadoes occur:**

(1) Heavy rain: when cumulonimbus clouds develop, it rains very hard for a short time, usually from 30 minutes to one hour.

ejecta	噴出	water vapor	水蒸気	volcanic ash	火山灰	pumice stone	軽石	volcanic bomb	火山弾
Pompei	ポンペイ	Mount Vesuvius	ベスビオ火山	Naples	ナポリ	severe disaster	激甚災害		
tropical cyclone	熱帯低気圧	overland flooding	内水氾濫	river flooding	外水氾濫				
cumulonimbus cloud	積乱雲	thunder	稲妻	lightning	雷鳴	thunderbolt	落雷		

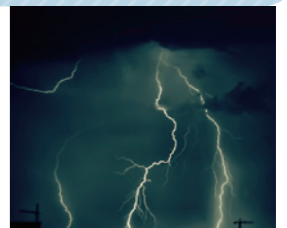
- Stay away from rivers and take shelter where water does not flow in.
- Avoid low areas such as tunnels, which water may run into.
- Do not walk on roads that are flooded.

(2) Thunder: evacuate when hearing the sound, as there is a danger of thunderbolts and lighting.

- Avoid staying under the tree as lightning strikes tall objects.
- There is a risk of being hit by lightning even when not wearing metal items.

(3) Tornado: a tornado is dangerous because it occurs suddenly, and there is a risk of being hit by strong winds as well as objects being blown around. When seeing a tornado or hearing its roaring sound, evacuate as soon as possible.

- Take shelter in sturdy building such as a reinforced concrete building.
- Riding a car is dangerous as it may roll over.
- When staying at home, close the curtains, stand away from the windows, and stay in the center of the room.



There is a risk of lightning when you hear thunder.



The tornado blows around a lot of objects.

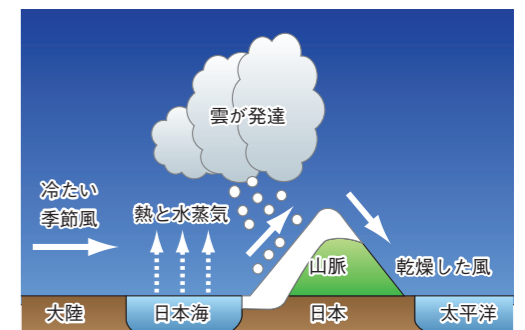
Heavy Snowfall and its Damage

When heavy snow fell in eastern Japan in February 2014, it paralyzed transportation and created isolated areas, with more than 20 casualties including two people who froze to death.

① **Mountainous regions along the Sea of Japan are the areas of heavy snowfall:** Heavy snow falls in Japan when a wintry pressure pattern with high pressure to the west and low pressure to the east of Japan occurs, and the northwest seasonal wind blows. Especially in mountainous regions along the Sea of Japan, it snows a lot with the following conditions: the climate condition of the northwest seasonal wind blowing, the geographic condition of the warm current (Tsushima Current) running off the Sea of Japan on the west side of the Japanese archipelago, and the topographic condition of a mountain range being in the center of the Japanese archipelago.

② **Damages of heavy snow:**

- **Transportation disruption:** a large quantity of snow has a great effect on public transportation, such as the suspension of train services and road closures.
- **Snow removal:** depending on the year, the operation causes many casualties by falling from the roof and being buried under snow that falls off the roof.
- **Avalanche:** there are two types of avalanches called “surface avalanches” and “full-depth avalanche.” The former is when fresh snow falls on the piled and crusted snow and slides down, and the latter is when a full layer of snow slides down.
- **Disasters of flood and landslide:** as it gets warm, the snow melts and a large amount of water flows into rivers, which causes flood as well as debris flow and landslides.



The mechanism of snowing on the mountains along the Sea of Japan with a wintry pressure pattern (schematic diagram)



Snow removal work

roaring	ゴロゴロ音を立てる	sturdy	頑丈な	reinforced concrete	鉄筋コンクリート	heavy snowfall	豪雪
warm current	暖流	Tsushima Current	対馬海流	avalanche	雪崩	surface avalanche	表層雪崩
full-depth avalanche	全層雪崩	schematic diagram	模式図				

32 Yamada High School's Mission of Passing Down Memories by Record Inscriptions and Testimonies in the Period for Inquiry-Based Cross-Disciplinary Study

Yamada High School conducts “the Memory of Monuments” activity in the Period for Inquiry-Based Cross-Disciplinary Study, in which the students try to find out the problems of the community by themselves and research about them by visiting and interviewing the local people face to face.

Hearing from the Storytellers Who Experienced the Tsunamis

The first-year students in 2019 conducted a reconstruction and disaster-prevention study based on the Iwate Nippo newspaper's serial of articles “the Memory of Monuments” as learning materials, which have traced the stone monuments of tsunamis after the Meiji Period and the lessons of the Great East Japan Earthquake.



The students listening to a local elderly person who is one of the story-tellers

They were divided into eight groups in the fieldwork to research the stone monuments of the Meiji Sanriku Tsunami of 1896 and the Showa Sanriku Tsunami of 1933, which were built in four areas: Osawa, Orikasa, Funakoshi, and Tanohama in Yamada Town. After seeing the inscriptions and the situation of affected areas, they conducted the interviews with each local storyteller.

The group which visited Tanohama area saw a stone monument which was left tilted due to the Great East Japan Earthquake. After that, they listened to Ms. Nakamura Toki, who experienced three tsunamis: the Showa Sanriku Tsunami of 1933, the Chile Earthquake and Tsunami of 1960, and the Great East Japan Earthquake.

The storyteller, Ms. Nakamura Toki, is a 98-year-old woman who experienced the 2011 earthquake at the age of 89. Although she lives on high ground now, she used to live on a low grounds near the sea at that time.

The most impressive words for the tracing-monuments' group were “Imagine the tsunami after the big earthquake occurred.”

Ms. Nakamura experienced the Showa Sanriku Tsunami of 1933 and the Chile Earthquake and Tsunami of 1960. I think she knew just how terrible tsunamis are and told her story with the wish that everyone will run away and survive.

Ms. Nakamura was always aware that a tsunami occurs after an earthquake. Actually, she was convinced of the tsunami coming after the Great East Japan Earthquake.

I was strongly impressed with her words—“Nothing is more valuable than life.”

Ms. Nakamura said that she felt so sad that she shed tears when she left Tanohama, but she made up her mind to evacuate. She also said that she was filled with gratitude as many people supported her. (The excerpts from the newspaper the group edited.)

To Pass Down the Lessons

The group which visited the Orikasa area found a problem.

There were two stone monuments in front of Orikasa Elementary School. One was of the Meiji period and the other of the Showa period. Both of them were inscribed in classical Chinese and difficult for modern people to read.

The people living in the area knew of the existence of the monuments, but few people were able to understand their meaning. We think that people have lost the chance to take notice of the monuments as they were written in classical Chinese.

(The excerpts from the newspaper the group edited.)

In one of the two stone monuments the “Giant Tidal Wave Monument” built in the Meiji period, for example, the situation of Orikasa at the Sanriku Tsunami of 1896 was written precisely and the following lessons are inscribed: “Nothing is certain in life. It is impossible to predict a disaster. How could you be not afraid of and cautious about it?” However, the lesson was difficult to pass down to younger generations because it was written in classical Chinese.

The students of the group raised their awareness, saying “The lesson will fade from our memories if we only erect stone monuments. We want to become storytellers and pass them down in words.” Moreover, they analyzed the current situation and made proposals at the result presentation such as “making monuments from wood and renewing them so that the letters and expressions will not become old” and “digitalizing what was written on the monuments.” The achievements of the reconstruction and disaster-prevention study, including the fieldwork, in which the students aim to “become storytellers to pass down the importance of life to the next generations,” are open to the public on the website containing the digital map “Google My Maps.”

The Period for Inquiry-Based Cross-Disciplinary Study in Yamada High School is helping students acquire knowledge of disaster prevention, which weaves together history and fosters future storytellers.



The students researching the stone monuments scattered all over the town

33 The Road Clearance Operation “Teeth of a Comb” Securing Vital Roads

These roads are important lifelines to carry people and goods, which we are not usually aware of. If we cannot use the roads due to a large-scale disaster, the rescue team and relief supplies cannot arrive at the affected area either.

The “Teeth of a Comb” Operation Planned on That Day



On March 11, a little after 7 pm in the Disaster Risk Management Office of the Tohoku Regional Bureau, the cameras in the coastal areas did not work and the monitors became blue.

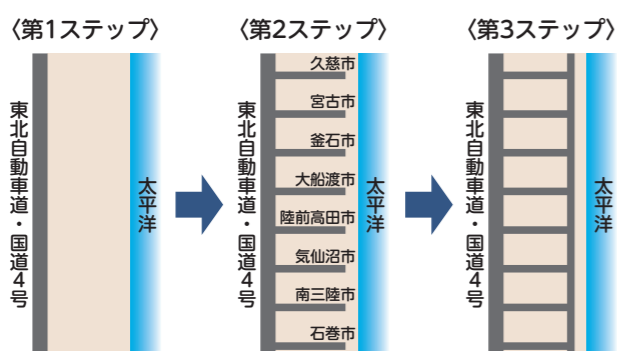
(Source: Sendai City, Miyagi Prefecture)

In February 2013, documents from the Ministry of Land, Infrastructure, Transport and Tourism revealed that the Great East Japan Earthquake impacted a total of 15 expressways, 69 sections of national routes, 102 sections of national highways, and 539 sections of prefectural roads.

On March 11, 2011, immediately after the earthquake in Iwate Prefecture, National Route 45, connecting coastal areas from north to south, was severed. The roads linking inland and

coastal areas suffered damage, isolating tsunami-affected areas. This not only impeded sending rescue teams but also confirmed the extent of the damage.

The Tohoku Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), responsible for developing and maintaining national routes, rivers, and ports in the Tohoku Region, entered emergency mode at 2:46 pm, immediately after the onset of the disaster. The bureau launched the rescue helicopter “Michinoku” from Sendai Airport at 3:23 pm, just before the airport succumbed to the tsunami. Real-time damage information was collected using this helicopter and fixed-point cameras along national highways.



The conceptual diagram of “Teeth of a Comb” operation, which was named after the shape of the horizontal lines

Images of the tsunami were shown on monitors, but in areas severely impacted by the disaster, communication channels were already severed. Consequently, there were no reports of damage coming in from the affected sites. The search-and-rescue teams needed to be sent out as soon as possible.

The bureau deemed road opening more urgent than emergency road repairs, leading to the formulation of the road opening operation, later known as the “Teeth of a Comb” operation. This operation, focused on swiftly disposing of debris and leveling roads for the passage of emergency vehicles, aimed to secure rescue routes promptly.

The three-step plan began by securing the north-south axis line of the Tohoku Expressway and National Route 4, connecting inland areas. The second step involved extending horizontal axis lines from this vertical line to coastal regions. The third step focused on opening roads from the coastal points where the horizontal lines reached, reestablishing routes from north to south.

Sixteen routes, including nine in Iwate Prefecture, were selected as horizontal lines. Key routes, such as National Route 45 and National Route 395, were prioritized for clearance work to ensure access from National Route 4 to National Route 45. This strategic approach facilitated effective road-clearing efforts in the aftermath of the disaster.

To Save as Many Lives as Possible

The “Teeth of a Comb” operation commenced on the morning of March 12. Officials from various local governments, members of the Ground Self-Defense Force, local construction company workers, and staff from the Regional Bureau worked together to meticulously clear debris-covered roads.

The task proved extremely challenging, as haphazardly pushing debris aside was not an option. There could be survivors or bodies beneath the rubble. In areas where people were likely buried, debris was manually removed, and if a body was found, the police were called for confirmation before removal. The ongoing tsunami warnings necessitated frequent work interruptions during aftershocks.

Despite these challenges, driven by a sense of mission to “save as many lives as possible” and compassion for their communities, people continued working. By 2 pm on March 12, nine horizontal routes were accessible, expanding to 11 routes by 8 pm.

The horizontal routes progressed further, with 14 accessible by March 14, and by March 15, all 15 routes, except for one affected by a nuclear power plant incident, were cleared. The third step involving the clearance of National Route 45 also advanced, allowing 97% of routes from Sendai City to the Aomori Prefecture border to be passable by March 18. This enabled the smooth passage of emergency vehicles, including fire trucks, ambulances, police, and Self-Defense Forces, and facilitated the delivery of crucial relief supplies.



The road clearance work in Rikuzentakata City (Source: Rikuzentakata City, Iwate Prefecture)

34 Kamaishi Fisheries Radio Station Giving Information about the Affected Areas

You know that mobile phones are difficult to connect when a disaster occurs.

As the means of communication at the time of disaster there are fixed-line phones, public phones, disaster administration wireless communications, and leased satellite channels, but all of these methods may be interrupted by the disaster and be unavailable because of overusing.

During the Great East Japan Earthquake, many communication tools were interrupted, but one radio station continued to broadcast about the situation in the affected areas.



On March 11, 2011, Mr. Azumaya tries the radio communication on the international distress frequency.

Is Anyone Listening?

“A huge earthquake occurred. Be careful of the tsunami. Ships evacuate at once.”

Mr. Azumaya Tsutae, director of Kamaishi Fisheries Radio Station that stands on the high ground looking down over Kamaishi bay, made navigation warnings on the fishery radio immediately after the earthquake occurred. The tsunami coming was beyond his imagination, however. From the windows of the radio station, he saw many ships swallowed up and houses crushed.

The area around the radio station became an isolated island as the roads were cut off and fixed-line phones and communication cables of internet networks were also cut off, and he lost any way to communicate with the outside. Of course, mobile phones could not be connected.

Many people who survived the tsunami gathered at the radio station and Kamaishi Commercial and Technical High School nearby.

“I have to let the outside world know that the evacuees are safe and how terrible the situation of Kamaishi City is, and ask for help by any means,” Mr. Azumaya thought to himself.

At 8:30 pm on March 11, taking a microphone, he said on the fishery radio, “Is anyone listening?”

He used the international distress frequency 2182 kHz which is used when a ship in distress sends out SOS messages. The radio waves of this frequency can be transmitted far away because they are reflected on the ionosphere at night, so

somebody should have heard of it.

Mr. Azumaya said he was prepared to be punished because the fishery radio is only used between the radio station on land and fishing boats when they talk about the weather, the oceanographic phenomena and the situation of operation in the fishing ground, or hold a meeting about operations. Sending out SOS messages from the radio station on land, he was likely to be held accountable for the violation of the Radio Act for the reason of using the radio for other purposes.

Giving the Names of Evacuees' Letter by Letter

“I'm hearing you.”

Chiba Prefecture Fisheries Radio Station (Onjuku Town, Chiba Prefecture) and Ibaraki Prefecture Fisheries Experiment Station's Fisheries Radio Station (Hitachinaka City, Ibaraki Prefecture) answered to Mr. Azumaya's call.

He gave information to the two stations on the radio, which they relayed to Iwate Prefectural Government by fixed-line phones. Kamaishi City, which was isolated, could thus secure a way of communicating to the prefectural disaster response headquarters.

Mr. Azumaya told them the damage situation in Kamaishi City and began to read the list of the evacuees' names.

““I” of Iroha (Japanese traditional alphabet), “no” of nohara (field), “ku” of kurabu (club) adding little dashes of diacritical mark, “chi” of chidori (plover).....”

To prevent the names being misheard, he used the Japanese radiotelephony alphabet, which is usually used to exchange messages with deep-sea fishing boats, and steadily gave the names letter by letter. Their communication continued after midnight.

The international distress frequency is often crossed by communication of each country's organizations such as foreign coast guards and so on, but that night the radio stations all over the world avoided communicating except for urgent matter and kept silent in order not to prevent Kamaishi's communications.

After that, they could communicate with the prefectural fisheries guidance and research vessel “Iwate-maru,” which took refuge off the coast, and secure another way of communicating to the prefectural government by the marine satellite phone of the vessel. On March 13, a message from a vessel, which was anchored in Hakozaki Town, Kamaishi City, was sent to Mr. Azumaya on the radio, saying that a patient in the evacuation center was dying as they could not use an artificial dialyzer due to the power outage. He gave the information to the prefectural government by way of the Iwate-maru and a helicopter was sent out to rescue the patient successfully. After that, Kamaishi Fisheries Radio Station continued to send many relief requests and so on from Kamaishi City to the prefectural disaster response headquarters for about half a month.

The usefulness of fishery radio at the time of disasters was recognized again by the experience of the Great East Japan Earthquake. Now, the Japanese Government allows communication between each fishery radio station in case of emergency, and emergency communication drills connecting with a local government, fishery radio station, and prefectural government are conducted in many regions in Japan to prepare for a large-scale disaster.

radio station 無線局 Kamaishi Fisheries Radio Station 釜石漁業無線局 fixed-line phones 固定電話
public phones 公衆電話 disaster administration wireless communications 防災行政無線 leased satellite
channels 専用衛星回線 radio communication 無線通信 international distress frequency 国際遭難周波数
navigation warning 航行注意 fishery radio 漁業無線 ionosphere 電離層

fishing ground 漁場 be held accountable for ~ ~の責任を問われる the Radio Act 電波法 the prefectural
disaster response headquarters 県災害対策本部 Japanese radiotelephony alphabet 和文通話表 deep-sea fishing
boats 遠洋漁船 coast guard 沿岸警備隊 fisheries guidance and research vessel 漁業指導調査船 marine
satellite phone 衛星船舶電話 artificial dialyzer 人工透析機

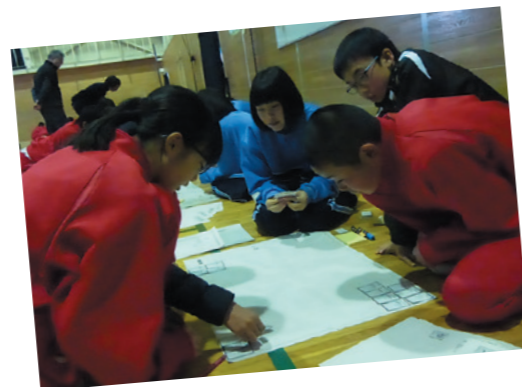
35 Kuji Higashi High School Improves its Disaster Prevention Ability Cooperating with Elementary and Junior High Schools

Kuji Higashi High School became a regional cooperation designated school with neighboring Kuji Elementary School and Kuji Junior High School in 2017. The three schools cooperated to do many activities including visiting disaster prevention classes held by the high school students.

Joint Seminar about Disaster Prevention with Kuji Elementary School and Kuji Junior High School

In October 2017, Kuji Higashi High School held a joint seminar about disaster prevention with Kuji Elementary School and Kuji Junior High School at the gymnasium of the junior high school. They played the simulation game for managing a shelter-HUG(*1) together in the first part, and the high school students taught the junior high school students how to make emergency kits with milk cartons in the second part.

Using milk cartons and juice cartons, they put the foods containing nutrients needed in one day into the emergency kits. They were devised to secure enough energy for 24 hours until rescue comes, and the students of Kuji Higashi High School worked hard to promote the kits at the school festival and so on. The kits contain foods such as biscuits, chocolate and canned tuna, glucose, vegetable juices, candies and gums as substitutes for toothpaste. They also contain rice cooking bags for emergency, tamago boro cookies and ramune soda candies for children, and rice porridge for the elderly.



Playing the simulation game of managing a shelter-HUG, the students exchange their opinions.

Looking Back on the Great East Japan Earthquake with Elementary and Junior High School Students Using Wall Newspapers

In the spring of 2018, the third-year students of the information business course at Kuji Higashi High School researched the state of damage and reconstruction relating to the Great East Japan Earthquake in the areas along the Sanriku Coast and made 15 wall newspapers. On May 29, they visited Kuji Elementary School to learn about the earthquake from each other with the wall newspapers. While the elementary school students said that they were able to learn how important preparation was, the high school students said that they were able to learn something new by talking about the disaster.

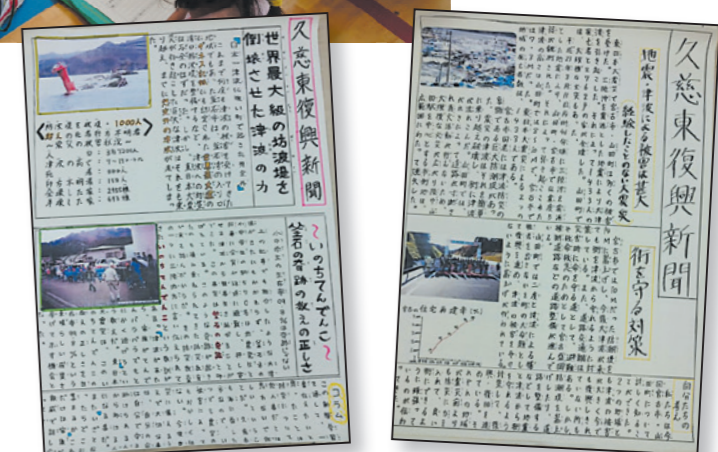
On June 29, the high school students visited Kuji Junior High School, of which 150 students in the second year were divided into 15 groups, and the students conducted joint classes about disaster prevention. The high school students told how terrifying the tsunami was and how important running away quickly was, while the junior high school students examined what they could do for the disasters after having listened to what the high school students told them.

After the high school students examined the general disaster prevention hazard maps in Kuji City, they made a proposal that the best evacuation place for the Kuji Junior High School was Kuji Higashi High School.



The high school students learned together with the elementary school students using wall newspapers.

*1: HUG stands for Hinanjo (shelter), Unei (operation) and Game. Putting cards with some information such as ages, family structures, people with chronic diseases and other details on a piece of paper representing an evacuation center, students can learn as they play about how to manage the center.



The wall newspapers the high school students made

36 Act According to the Word “Tendenko” at the Time of a Disaster so as not to Blame Anyone

Miura Hitomi, teacher of Sumita Senior High School

One night my mother said suddenly in the futon mattress, “Never think that your father and mother can always protect you. If something happens, we may be completely wrapped up in what happens to ourselves. Protect your own life by yourself.” I could not forget that night.

Time has passed and the Great East Japan Earthquake occurred on March 11, 2011.

I Could Do Nothing but Run Away

On that day, my son was ill and I took time off from work to take care of him. At 2:30 pm, my husband came home to take turns nursing him. Suddenly, the huge shaking occurred, and we evacuated to higher ground, screaming to see our house swallowed up. We could not meet my daughter who went to the nursery school that night. The telephone was not connected. I thought she was safe, but I could not rest for worry. The next day, we moved to the evacuation center at Kasshi Junior high school, where the four of our family gathered at last.



Seeing my daughter’s sleeping face, I looked back over the day before and various thoughts passed through my mind: If I had not been taking care of my son, I might have picked up my daughter and have been stuck in traffic and swallowed up by the tsunami. If I had gone to help neighboring elderly people and a blind acupuncturist, what would have happened to me?

When I evacuated, I could do nothing but just run away. Fortunately, all of our neighbors were safe, but if they had not been, what would I have been thinking as I led my life?

My Mother’s Lesson

It was when I was in the lower grades of elementary school, which I remember clearly. When I talked with my mother in the futon mattress until falling asleep as usual, she said suddenly, “Never think that your father and mother can always protect you. If something happens, we may be completely wrapped up in what happens to

*仮定法過去完了の用法が使われている。「もし～だったら、～したろうに」 acupuncturist 鍼灸師

ourselves. Even if we want to protect you, we may not be able to do so. Protect your own life by yourself.”

My mother was born in Kamaishi. She probably had thought she had to tell her child someday. My children experienced such a huge earthquake before I told them about it. We were all in Kamaishi City at that time, but my son, who was near the sea, saw the tsunami, while my daughter, who was away from the sea, did not. My children had different experiences of the disaster, which may result in some differences in the future. However, I hope they, especially my son, will act according to the lesson “Be an initiative evacuee,” to protect our lives.



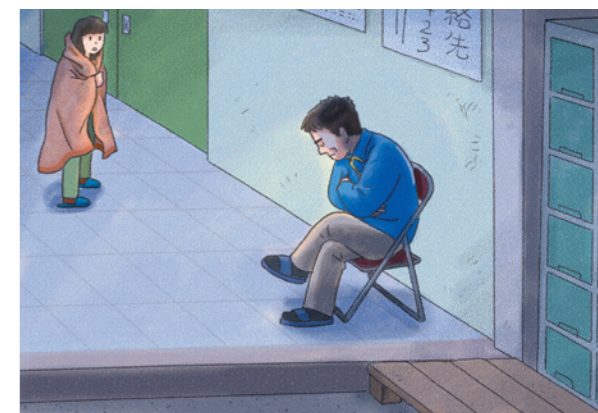
Do Not Blame Anyone

We could stay warm in the evacuation center saving fuel at Kasshi Junior High School, with a potbellied stove in place and blankets distributed. Even at night, I did not feel cold as the disposable body warmers were distributed. Probably the city government officers and school teachers managed the evacuation center. In spite of the same circumstance as us, our surroundings in the evacuation center differed. I never forgot an officer sitting and taking a nap in front of the entrance of the junior high school at night. As the entrance was unheated, we felt bitterly cold. I wondered if he might die.

After the earthquake, I thought people from all over Japan would head towards the restoration, but they did not. We were all affected in different ways and also have different ways of thinking about the disaster. There were lawsuits between local governments and residents about evacuation responses and so on. I felt that my heart was tightened every time I heard the news. I sympathize with the bereaved families, but I do not want anybody to blame anybody else. All of us were struggling to live. We must have chosen the best ways that we could at that time.

The officer taking a nap in the cold entrance at Kasshi junior high school was engraved on my memory. Seeing him, I cannot speak ill of the local government.

I hope everybody will remember the word of the Tohoku dialect “tendenko,” and never fail to act according to this word meaning “every man for himself,” and thereby save your loved ones and blame no one, including ourselves.



disposable body warmers 使い捨てカイロ lawsuit 訴訟 bereaved (家族などに)先立たれた Every man for himself (and the devil take the hindmost.) (ことわざ) 自分を守りなさい (そして悪魔は最後に取り残されたものを捕まえる。)

37 The Disaster Prevention Activities in Schools for Special Needs Education

Hanamaki Seifu Special Needs School Conducted a General Disaster Prevention Drill

On September 11, 2018, Hanamaki Seifu Special Needs School conducted a comprehensive disaster prevention drill, involving evacuation and pick-up drills for different school levels, simulated experiences of evacuation centers, and disaster prevention leadership experiences. Conducting various drills throughout the year, the school aimed to enhance collaboration and overall disaster prevention capabilities.

The drill simulated a large earthquake, prompting teachers to assess damage and check for injuries during a power outage. Students, wearing helmets, followed evacuation instructions to the gymnasium. The school then opened an evacuation center with essential facilities. Junior and senior high school students not only experienced emergency scenarios but also actively participated in consuming emergency food, using disaster toilets, and engaging in a simulated overnight stay. Meanwhile, elementary students practiced being picked up by parents after evacuating.

After the drill, the disaster prevention adviser suggested a score of 70 to 80 points and recommended considering transceivers for more effective communication in future scenarios. The active participation of junior and senior high school students in consuming emergency provisions, using disaster toilets, and simulating overnight stays highlighted their practical exposure to crucial disaster preparedness measures. The school's efforts underscored the importance of comprehensive disaster preparedness and collaboration.

The Disaster Prevention Drills of Morioka Mitake Special Needs School Improving Year by Year

The High School of Morioka Mitake Special Needs School has conducted the disaster prevention drills about three times a year since the high school was established in 2009. For example, the drill for a fire in May, the drill for an earthquake in September and the combined drill for a fire after an earthquake in November. The order of the fire and earthquake drills depends on the year.

Improving their drills year by year, they added one more step where they hear the Earthquake Early Warning before evacuating from 2012, started to use the absence confirmation plate from 2013, and invited the local organizations to take part in the drill from 2015. Moreover, since 2013, they set a rule under which all the children always keep in their bag a support book stating how they behave, ways



Evacuating calmly



Experiencing the simulated stay



Experiencing the emergency toilets



Pill bug poses to protect heads

of supporting them, and their contact information. Since 2014, on a disaster prevention educational day held every March 11, they have learned about the Great East Japan Earthquake by watching DVDs and conducting a shakeout drill to protect their lives by themselves.



Experiencing the smoking drill

Kamaishi Shoun Special Needs School Conducts an Evacuation Drill at the Main School Building and the Shakunage Branch Class

Kamaishi Shoun Special Needs School is actively engaged in enhancing reconstruction and disaster prevention education. With three separate school buildings—the main school building, the high school building within Kamaishi High School, and the National Hospital Organization Shakunage Branch Class within Kamaishi Hospital—the high school students collaborate with Kamaishi High School for joint disaster prevention drills, while students in the main building and Shakunage Branch Class conduct comprehensive disaster drills three times a year using transceivers for communication.



The evacuation drill for high school students

Due to the main building's location in a designated landslide alert area, the school is creating a manual for evacuations during heavy rain. Additionally, classrooms are equipped with disaster prevention hoods and helmets, which students bring to school assemblies and events. Given the presence of students experiencing trauma from the earthquake, the school conducts evacuation drills using broadcasts only, excluding earthquake sound effects, to avoid triggering anxiety.

An ongoing challenge is to instill daily-life disaster prevention awareness and conduct disaster prevention education in collaboration with the community.

Morioka Honan Special Needs School Respects Students' Autonomy to Conduct Reconstruction and Disaster Prevention Education

Morioka Honan Special Needs School adopts a distinctive approach to reconstruction and disaster prevention education, emphasizing students' autonomy. The student council actively engages in planning and operating disaster prevention evacuation drills conducted three times a year, simulating earthquakes and fires at both school buildings and dormitories. In their disaster prevention studies, students explore challenges related to "electricity and gas," "water supply," "communication," and "transportation and traffic." They prepare for lifeline disruptions by creating makeshift heaters and cook stoves, showcasing their resourcefulness. Furthermore, students participate in disaster prevention and first aid classes at the Prefectural Disaster Prevention Center. The school actively raises awareness during the school festival by presenting displays created by each grade and sharing their findings in reflective meetings for collective learning.



The disaster prevention experience seminar



The debriefing meeting for reconstruction learning

shakeout drill シェイクアウト訓練 Kamaishi Shoun Special Needs School 釜石祥雲支援学校
 National Hospital Organization 国立病院機構 landslide alert area 土砂災害警戒区域
 Morioka Honan Special Needs School 盛岡峰南高等支援学校 autonomy 自主性 dormitory 寄宿舎
 first aid 応急処置 Prefectural Disaster Prevention Center 県の総合防災センター

Schools for Special Needs Education 特別支援学校 Hanamaki Seifu Special Needs School 花巻清風支援学校
 disaster prevention drill 防災訓練 Morioka Mitake Special Needs School 盛岡みたけ支援学校 Earthquake
 Early Warning 緊急地震速報 pill bug ダンゴムシ absence confirmation plate 不在確認プレート