



# Current status of Center for Disaster Education & Recovery Assistance



Miyagi University of Education  
Center for Disaster Education & Recovery Assistance



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# Initiatives of the university for recovery of education in the disaster-hit areas, and prospects of recovery

The Great East Japan Earthquake resulted in the loss of many precious lives. I extend my deep condolences to the people who lost their lives. In addition to sincerely praying from the bottom of my heart that the recovery efforts progress smoothly, we are putting our best efforts for the recovery of education at our university.

**Dr. Kazuyuki Mikami**  
President, Miyagi University of Education



## Response at the time of disaster

Immediately after the Great East Japan Earthquake, while the university was putting all its efforts to confirm the safety of students, restoring the lifeline services, and inspecting the safety of buildings and facilities; students, faculty members, and staff members of the university started providing voluntary and dedicated support to the disaster victims and the disaster-hit areas. We express our heartfelt gratitude to the committed hard work of students who were engaged in taking care of college students in the university on practical training, faculty members who looked after the affected students at their own residences, and administrative staff members who provided support to the disaster-hit areas on weekends. Amidst this,



the university came up with “Miyagi and Sendai Future Development Project”, and extended the support of university such as providing relief goods. As the initial structure of this support, day-to-day “relationship” such as network of practical training and UNESCO Associated schools came in handy, which finally evolved as a bridge linking the disaster-hit schools and support personnel.

## Activities of Center for Disaster Education & Recovery Assistance

In June 2011, right after the earthquake, the university established Center for Disaster Education & Recovery Assistance as the core unit responsible for taking initiatives for recovery of education in the disaster-hit areas. In addition, 14 universities from all over Japan also extended their cooperation by dispatching volunteers, and they are engaged in volunteer activities for supporting learning along with the students of our university. Moreover, in cooperation with the local boards of education, we have been compiling articles on the lessons from recovery of education after earthquake for each region.

From April 2013, in addition to the aforementioned Practical Support Division, we further activated Research and Development Division. In June 2013, construction of the building of the center was



completed.

In Center for Disaster Education & Recovery Assistance, Kesennuma Office (c/o Collaboration Center), Sendai Central Office, and Iwanuma Office were established in parallel. Kesennuma City and Miyagi University of Education Collaboration Center offered the same place as the city board of education in the former Kahoku building that was donated to Kesennuma City by Kahoku Shimpō Publishing Co., Ltd.

Another recent progress is the increase in consciousness among students for volunteer activities, which has resulted in the demonstration of excellent capabilities, and voluntary support activities provided mostly to the students by forming volunteer teams.

## Global networking of disaster prevention and disaster risk reduction education

I think it is important to globally disseminate the knowledge and insights about lessons learned from the massive earthquake disaster. We are sharing the information with the world by publishing the articles related to earthquake disaster, publishing newsletters on our website, publishing brochures of volunteer activities all in English, while inviting non-Japanese speakers in “Recovery Cafe”


organized by the center, and receiving visitors from overseas.

## Transfer of knowledge and lessons learned through collaborative network of disaster risk reduction education

It is said that a massive earthquake like the Great East Japan Earthquake strikes once in thousand years. What kind of message should be conveyed until the next thousand years where the next massive earthquake strikes? In preparation for natural disasters that frequently occur across the world, continuously interacting through the global network that offers mutual support is one of the important methods. For that, Miyagi University of Education is aiming at building a network for extensively sharing scientific knowledge and experience of disaster handling in educational institutions. For children who would be playing important roles in the future, in addition to putting our best efforts for recovery of the disaster-hit areas, compiling the lessons learned from the disaster, effectively communicating them, and passing them over generations is a key mission assigned to our university.







# Current status of Center for Disaster Education & Recovery Assistance

Miyagi University of Education established Center for Disaster Education & Recovery Assistance right after the earthquake in June 2013 for contributing to the recovery of education. So far, in collaboration with teacher-training universities all over Japan, we have provided support for learning by sending about 4,000 student volunteers to the disaster-hit areas.

Over two years after that, we completed the construction of center building that would become the base of support activities for recovery of education in the disaster-hit areas, and its opening ceremony was held on June 29, 2013 where about 80 people including faculty members and students of the university, Ministry of Education, Culture, Sports, Science and Technology, and representatives from Miyagi Prefecture and municipal board of education participated.

Center building is a two-story reinforced concrete structure, with the total floor area of 285 square

meters. It is equipped with research laboratory and offices for teaching staff studying disaster risk reduction education, as well as a meeting room for students engaged in volunteer activities for the learning assistance.

Objective of the center is to clearly identify the priorities for recovery of education in Miyagi prefecture keeping in mind the recovery measures taken by the local municipalities, and provide support from medium to long term standpoint.

In addition to psychological care of children and students and aiming for improving their academic achievements, it is important to develop capabilities for surviving in the society in general. Besides, supporting the teaching faculty in institutions is also an essential initiative.

As a center engaged in recovery of the entire society, Center for Disaster Education & Recovery Assistance is on a firm path with the involvement of other universities and regions.

# Progress of Practical Support Division

## Status of volunteer activities for learning assistance

One of the most prominent outcomes of the activities undertaken by Center for Disaster Education & Recovery Assistance is conducting volunteer activities for supporting learning. Based on the request for support from board of education in the prefecture and schools in the disaster-hit areas, while coordinating with volunteer students sent from public and private universities in the prefecture and national teacher-training universities all over Japan, we are

engaged in various activities such as supplemental study sessions using long vacation and weekends.

Besides, apart from long vacation period, we also provide support by assisting in teaching during day-to-day classes and after school activities at Nakano Elementary School and Arahama Elementary School in Sendai City, and Tamaura Elementary School in Iwanuma City.

## Educating students through volunteer activities for learning assistance

### Recruiting volunteers for supporting recovery of education

While having a profound impact on our minds from various aspects, the 2011 earthquake taught us several things. With various memories in their minds, children in the disaster-hit areas are still attending their schools. Providing learning support to such children and interacting with them during recess time affords a great opportunity of future learning, and it also affects the innate qualities of teaching faculty over a period of time. Because of this, we have a strong desire of having more and more students of our university experience the volunteer work for supporting learning, and therefore we created the concept of “committee of volunteers for supporting recovery of education”.

### Building awareness about the importance of learning support

For having many students achieve the desired goal of improving their innate qualities as students of teacher-training universities through the earthquake disaster, we mutually confirmed that enriching the activities of volunteers engaged in supporting recovery of education in future is the most important item, and we decided to take measures for that.

To begin with, in addition to students' earthquake disaster recovery project that evolved from opinion exchange session between the representatives of

various volunteer associations arranged during the university festival, we organized a symposium “recovery after earthquake disaster as conceptualized by the students of Miyagi University of Education – What I can do”. We think what motivated students was the actual voice of students rather than we staff members.

Besides, we had our students actually visit the disaster-hit areas. By actually visiting Okawa Elementary School in Ishinomaki City, Tokura Elementary School in Minami Sanriku, Kadosnowaki Elementary School in Ishinomaki City, and Arahama Elementary School in Sendai City by bus, and through directly listening about the situation at the time of disaster from school principals, many participants were extremely moved and shaken from inside. Conversation in the bus was also such that it further deepened the significance of the visit. “We have the duty to listen to the talk of many people in disaster-hit areas, carefully consider their feelings, and know the truth. I could feel the sense of mission in becoming a teacher in this era, and I would like to protect lives and happiness of children in future. (from the feedback received from a student)”

Conveying the feelings from one student to another student. Such activities have been successful, and activities of students have also become more vigorous.





## Progress of Research and Development Division



### Full-fledged start of “Disaster Recovery Assistance Laboratory” under Research and Development Division

At Center for Disaster Education & Recovery Assistance, in addition to understanding the continuously changing situation of the disaster-hit areas and looking into the support needs for recovery, we have established Research and Development Division so that we can disseminate and share information with other Japanese and overseas institutions. For strengthening this function, we have assigned two specially appointed faculty members, who are engaged in collaborative survey and research.

After the center building was inaugurated, full-fledged research and study sessions have started.

We periodically organize “Recovery Café” for learning and discussing the status of recovery from earthquake and initiatives of various foreign countries for disaster prevention, thereby increasing awareness about role and mission of the center and refreshing the feelings for this initiative.

## Reconsideration of Disaster Risk Reduction Education Program and Preparation of Study Material

Based on the knowledge gained and lessons learned from the earthquake disaster, we are engaged in developing and conducting new disaster risk reduction education initiatives, and we are also involved in preparing study material for that. At present, through joint research with Center for Simulation Sciences, Ochanomizu University, we are participating in the development and verification of study material for simulating the operations of evacuation shelters.

## Insights Gained and Lessons Learned from the Great East Japan Earthquake

From the standpoint of socio-seismology, we would strive to understand natural environment (environment such as ground characteristics and topographical features) and social environment (especially, mechanism and dwelling environment in local society) specific to Tsunami-hit areas, collect information about successful and unsuccessful examples of evacuation from Tsunami disaster, and we would like to propose the ideal state of future regional plan and evacuation suitable to the regional environment in the case of Tsunami disaster. In that also, because we expect that schools have a very large role to play in disaster-hit areas, collaboration between board of education and schools will be very important in the future as well.

Besides, at Research and Development Division, we also participate in the activities of associations such as Japan Association for Earthquake Engineering, Association of Japanese Geographers, The Tohoku Geographical Association, and we are actively engaged in academic exchange through discussion with researchers in Japan and overseas.

## Demonstration and Practice of Creation of New “Avenues” for Community Disaster Risk Reduction

In community disaster risk reduction, it is important that various bodies such as government, schools, fire associations, voluntary disaster risk reductions organizations, neighborhood associations, and NGOs prepare for risks and disasters in cooperation. At our center, in collaboration with the researchers of International Research Institute of Disaster Science, Tohoku University, we organize research sessions and workshops, and we work towards creating new “Avenues” for community disaster prevention considering the lessons learned from the Great East Japan Earthquake.

Besides, for taking measures for preventing isolation of evacuation shelters in schools in cooperation with the model regions and schools in the prefecture, we have started initiatives for creating awareness about disaster communication volunteers using simplified wireless and amateur CB radio. By compiling the results and issues with such demonstration experiments, we would contribute to community disaster risk reduction of each area.

## Understanding the current needs for recovery of education in disaster-hit areas

With the cooperation of affected municipalities and boards of education, we strive to understand the current situation of recovery and issues faced by disaster-hit communities and schools. Especially, we conduct monitoring about spatial movement of victims who had no option but relocate or live in temporary houses, and relationship with the region as well as issues in town development.

Besides, leveraging the strengths of our university in terms of proven track record of collaborating with board of education and schools, teacher-training universities would collect and record information concerning their experience and lessons in using many schools as evacuation shelters at the time of the Great East Japan Earthquake.





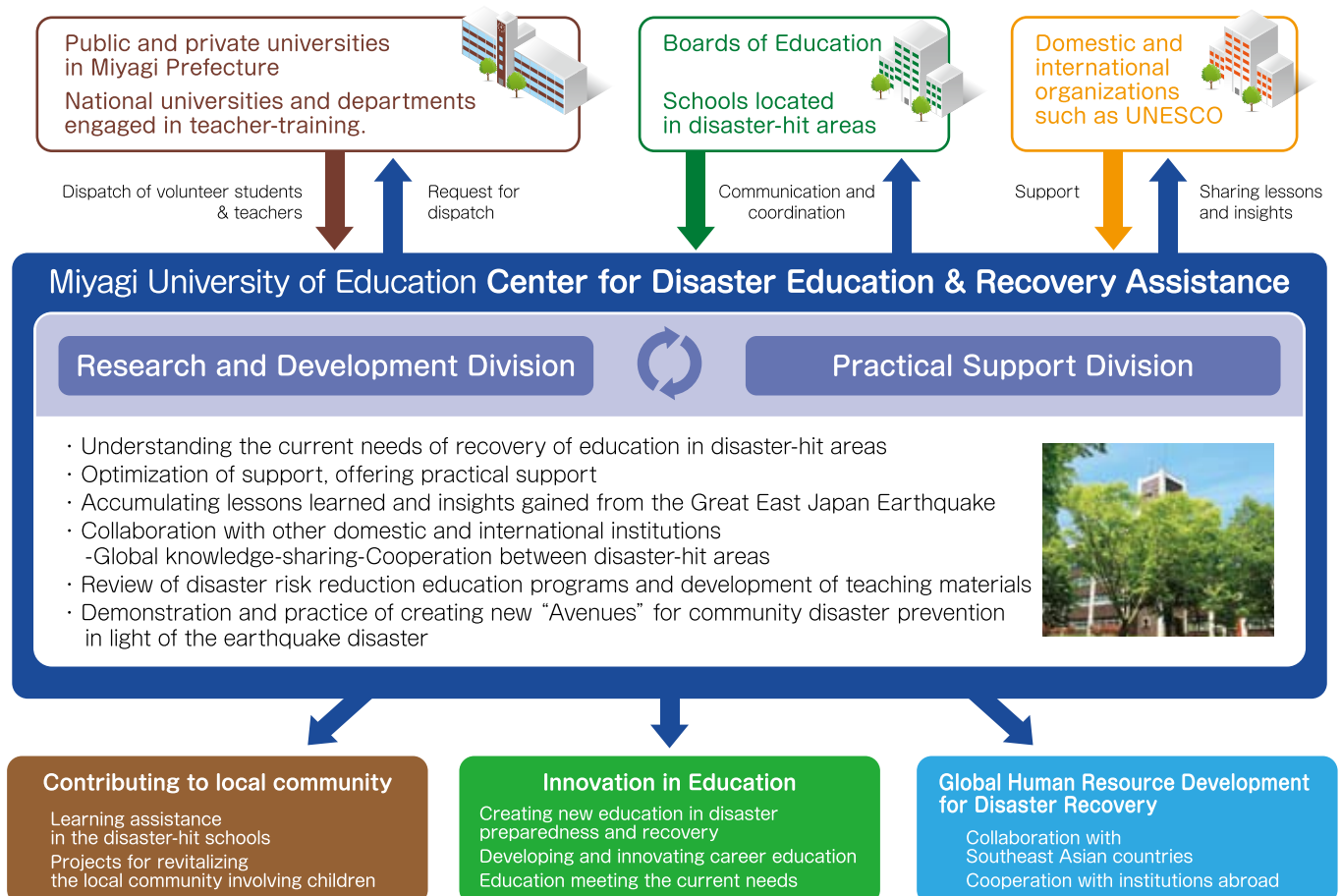
## Collaboration with other institutions in Japan and overseas ~Sharing of knowledge and insights at the global level~ Cooperation between disaster-hit areas

Lessons learned from the disaster would be effectively used once they are extensively shared and disseminated in Japan and overseas. At our center, by collaborating with other relevant institutions in Japan and overseas, in addition to sharing the lessons learned and insights gained from the disaster, we share knowledge by cooperating with other disaster-hit areas that suffered similar kind of disaster, and thereby contribute to recovery activities.

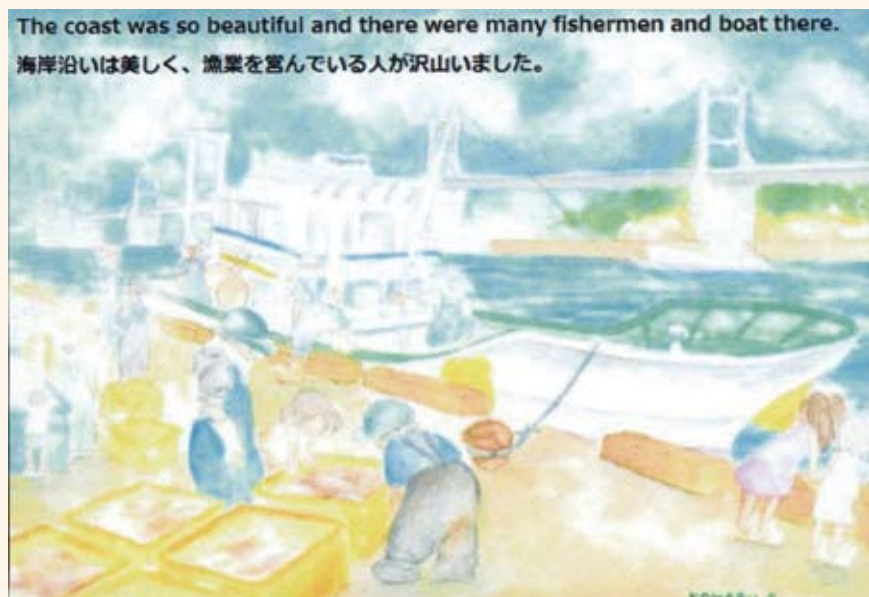
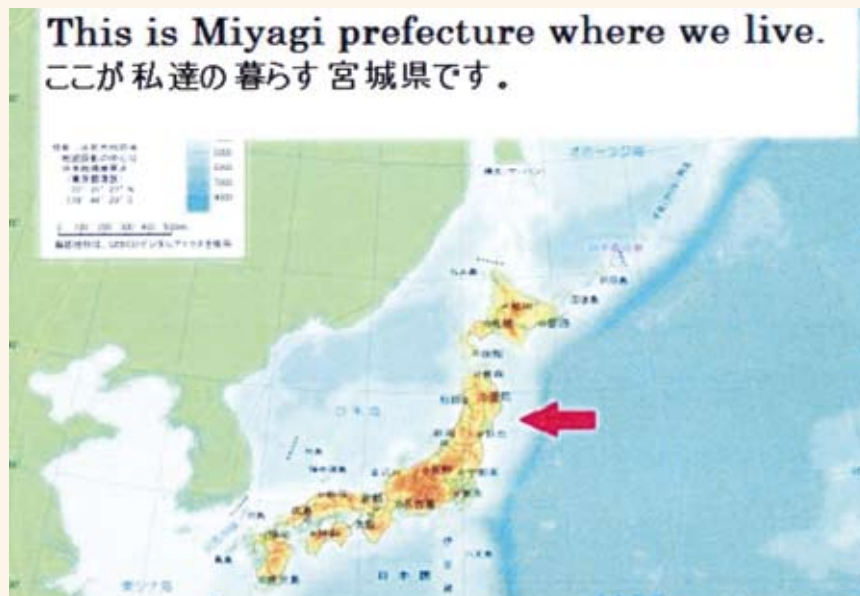
With the acceleration of globalization, there is an increasing demand for sharing knowledge and insights concerning disaster science, recovery from disaster, and disaster risk reduction with countries in the Asia Pacific region that are also prone to the risk of natural disasters.

At our university, we have been actively engaged in building network with the international society through the initiatives of environment education and Education for Sustainable Development (ESD), and UNESCO Associated schools. Through exchange training programs with the IIDEA of Ministry of Education, Thailand, with whom we have collaborated, and through opportunities like JICA group training, we promote exchange between researchers and practitioners in the fields of disaster risk reduction education and operation of evacuation shelters.

Besides, for the United Nations World Conference on Disaster Prevention to be held in Sendai in March 2015, we have set up our liaison office for the conference in Research and Development Division, and we would seek effective methods for information dissemination and discussion.



■ The following messages  
were written by students.







On March 11th, 2011, there was a severe earthquake. (This is the 4th biggest earthquake.) 15788 people died and 3151 are still missing.

2011年3月11日に非常に大きな地震がありました。（世界で4番目に大きな地震です。）

15788人の人が亡くなり、3151人の人が行方不明になりました。



The towering Tsunami killed many people and destroyed most of the coastline.

津波が海岸線を襲い、多くの命を奪いました。

©City of Sendai







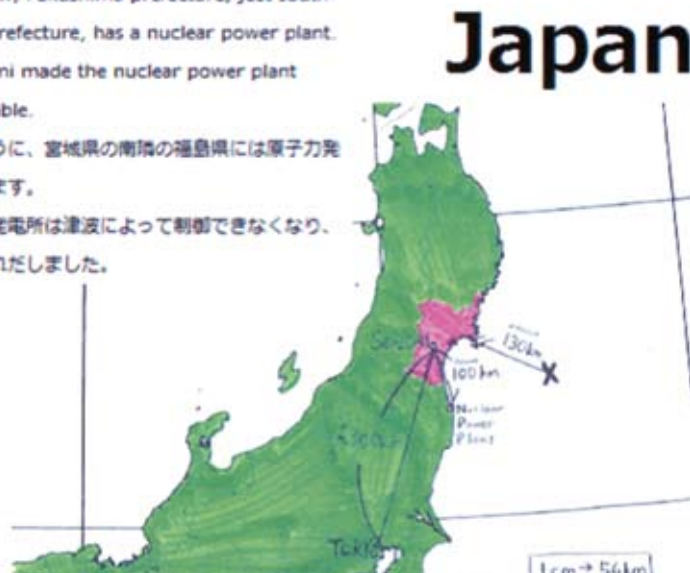
Even in Sendai city, we had to live without electricity, water, and even food for many days.  
We were very frightened by the force of nature.

津波がこなかった仙台市内でさえ、電気や水、さらには十分な食べ物もない生活が何日も続きました。  
自然の脅威を感じました。

As you know, Fukushima prefecture, just south  
of Miyagi prefecture, has a nuclear power plant.  
The Tsunami made the nuclear power plant  
uncontrollable.

ご存知のように、宮城県南隣の福島県には原子力発  
電所があります。

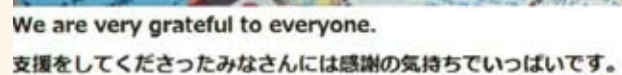
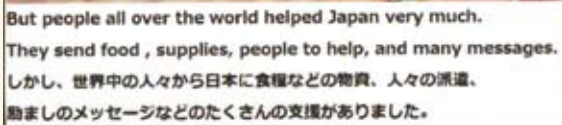
その原子力発電所は津波によって制御できなくなり、  
放射能が漏れだしました。



Many people (about 150 thousand people) who lived near the  
plant had to quickly leave their home to avoid radiation and still  
cannot return.

その放射能の被害を避けるため、多くの人々(約15万人)がすぐに避難し、  
未だに家に戻れないでいます。







Even now, people are still working together to rebuild their lives with everyone's good wishes in their hearts.

その感謝を胸に、今もがんばっている人が沢山います。



We are students of Miyagi University of Education in Sendai city, the only educational university in Japan, whose students experienced this disaster first-hand.

私達は被災した地域にある日本で唯一の教員養成大学で、  
仙台市に立地する宮城教育大学の学生です。







## English Version of Case Examples – Prologue

After the Great East Japan Earthquake on March 11, 2011, various initiatives are taken around the clock by the schools in the disaster-hit areas. In order to come out of this calamitous event that resulted in a massive loss of lives, and with a very strong thought of not letting people living in other regions and people in future experience such distressful lessons, 'New' approaches for disaster prevention and revival of education are implemented in the disaster-hit areas.

In the opening statement of this magazine, we presented the role of Center for Disaster Education & Recovery Assistance. In other words, their role is, 1) Assuring the learning environment and quality for children as much as possible by engaging them through volunteer activities by students and offering learning support to children who are suffering from unstable learning environment after earthquake, and 2) Academically compiling the lessons and insights gained from the earthquake of March 11, and disseminating it globally.

March 11 earthquake made us rethink about the appropriate role of schools as schools in the region, schools as evacuation shelters, and schools as the learning place for children. While making us look straight into the sad reality of disaster, schools also point us to new hopes in future. Children made us realize the obvious fact that schools help them overcome difficulties and make them feel relieved and happy because they have friends there and they can learn together with them. Appropriate role of schools in the disaster-hit areas post March 11 earthquake has drawn attention from all over the world.

Therefore, with the cooperation of education committees, schools, and association of principals from various regions, our center has published several collections of articles and collections of case examples so far with regard to operation of evacuation shelters in schools at the time of Great East Japan Earthquake and approach to revival of education after the earthquake. All of these collections are creative works and have excellent contents, and not only for Japan, they can be very useful for disaster prevention education and training all over the world. Given that, from the subsequent page onwards, we have picked up some example from the practical case examples published jointly by Sendai City elementary school principals associations, elementary school principals association, and our center in March 13 that, ① Specifically convey the situation at that time of earthquake, ② Talk about unique activities right after the disaster, and ③ We thought would be useful for disaster prevention education and training in schools. We have translated them into English with the permission of the aforementioned associations as an attempt to share some good practices with all.

If we look at the world today, trends of disaster prevention and sustainable society and education have reached a turning point in last few years. In March 2015, 3<sup>rd</sup> United Nations International Strategy for Disaster Reduction Conference for discussing international disaster prevention strategies is scheduled to be held in Sendai City, where the next version of Hyogo Framework for Action (HAF 2005) will be formulated. Besides, ESD would enter its 10<sup>th</sup> year (DESD) in 2014, and United National Millennium Development Goals (MDGs) would enter its 10<sup>th</sup> year in 2015. We would like to commit ourselves to worldwide disaster prevention with keeping our sight on such trends of education, development and issues faced at the global level, and we think that we have a very significant role to play as the center that would expand the local disaster prevention practices to the global level.

We wish that this collection of case examples would be useful in formulation and implementation of various disaster prevention measures for education in schools all over the world.

## An initiative to integrate Life Environment Studies and Disaster Risk Reduction Education

Hirose Elementary School

### I. The Role of Disaster Risk Reduction

#### Education and Life Environment Studies

Through Life Environment Studies, children should be encouraged to take an interest in the relationships among themselves, people close to them, society and nature, and think about their own lives, as well as laying the foundation for their independence by acquiring the necessary habit and developing essential skills for living in the process.

The role of Life Environment Studies is also important from the viewpoint of Disaster Risk Reduction Education. It is imperative that children acquire knowledge, skills and attitude to protect their own lives when a natural disaster occurs while they were at home or in the locality. Children should develop capacity to protect their own lives not only from a natural disaster, but also from traffic accidents and crimes.

### II. The Objectives and Contents of Disaster Risk Reduction Education in Life Environment Studies

At the time of rolling out the Disaster Risk Reduction Education, we reviewed the relation between the content of government curriculum guidelines for the Life Environment Studies and the learning content of Disaster Risk Reduction Education, based on the actual situation of the locality, children and their parents.

#### 【The Relation between the Content of Life Environment Studies and Disaster Risk Reduction Education】

Content of Life Environment Studies	Content of Disaster prevention education
(1) School and Life	<ul style="list-style-type: none"> <li>Include confirmation of escape routes in school exploration.</li> <li>Create Danger Map in school route one by one (version up from time to time).</li> </ul>

(2) Family and Life	Discuss among the family about crime prevention and Disaster Risk Reduction. <ul style="list-style-type: none"> <li>Decide the rules, always checking the actual places with family members.</li> <li>Create Danger Map along with the family and place it somewhere always visible.</li> </ul>
(3) Locality and Life	<ul style="list-style-type: none"> <li>While exploring the locality, include interaction with the local people, as well as confirming the location of safety station for children and creating locality Danger Map.</li> <li>Include the evacuation area for the earthquake strike in the locality exploration.</li> </ul>
(4) Use of public goods and facilities	<ul style="list-style-type: none"> <li>Confirm evacuation area.</li> <li>Through interaction with people working in public facilities, ask them to speak about their feeling or the role of the facility when an earthquake occurs, and collect one's thoughts on the Disaster Risk Reduction.</li> <li>Create Danger Maps by different situations, assuming an earthquake or a disaster occurs while at school, playing in the locality, or at home, etc.</li> </ul>
(5) Variation in climate and Life	Gather information about the folklores related to weather and weather forecasts from the local people.
(6) Play using nature and goods	Learn how to make essential goods at the time of disaster, by making goods like table and chair with things around oneself.
(7) Rearing animals and cultivating plants	Experience various activities from the making of soil to harvesting, and understand that basics of food is to "make by oneself".
(8) Interaction of life and events	Gather safety-related information from local people and make effort to judge by oneself. Develop in relation to (3), (4) and (5).
(9) Self-growth	Experience self-growth at the time of evacuation.



### III. Classroom Practice in Reality

#### 1. Creation and Implementation of Starting Curriculum which brings the learning content of “self-help” into the content (1) of the Life Environment Studies

##### Grade 1 [Exciting School Exploration]

The first Starting Curriculum included activities such as learning how to put on protective hoods and confirming escape routes as part of school exploration.

This year, we talked about what to do if a huge earthquake strikes in the initial school exploration. The children responded by saying “Get under the desk”, “Escape to the playground”, etc. Then, they actually put on protective hoods and confirmed escape routes. They could confirm escape routes multiple times earnestly and experience how to protect their lives by themselves.



There is a shutter. How can I close that? It says [Please do not touch]

#### 2. Drawing up the School Route Danger Map which brings the learning content of “self-help” into the content (3) of the Life Environment Studies

The cooperation of parents is essential in the study of school routes. During summer vacation, children walked through their school route along with their parents and they created their own danger map, while confirming the dangerous locations and rules. When the school reopened, every child gave presentation on the dangerous locations and rules for safety using the maps they created.



- A. Walk in a single line at railway crossings.
- B. Walk on the inner side of the foot path on road.
- C. Safety station for children (Mr/Mrs-san)



- A. Take care of cars and bikes at the pedestrian crossing in front of the Hirose Junior High School which has no traffic signal.
- B. While crossing the road with no pedestrian crossing, see left, diagonal left and diagonal back and confirm that there is no car or bike approaching before crossing the road.

[Kawamae So-ran~Umi yo Futatabi] [Tomo ni mae e]  
*“Kawamae soran...Again to the sea”“Together, We Move Forward”*

Kawamae Elementary School

### I. Purpose of practice

Although one year has passed since The Great East Japan Earthquake, processing and removal of debris has not progressed in the disaster-hit areas, which is very distressing for many people.

For the children of this school who were not directly affected by the disaster, they may not consider the Great East Japan Earthquake as their own problem. It is a fact that there are many children who do not feel any sympathy for the disaster-hit areas. There are very few children who could understand others' view point, and who could think about their feelings. Therefore, we felt a very strong need of fostering voluntary attitude. Hence, it became a strong need to foster voluntary attitude in children such as “Let us help each other” and “Let us walk Together”. We thought about an intentional and a planned way to deepen the emotions towards the disaster-hit areas.

In the district schools' sports meet, our school presents the [Kawamae Soran]. One of the specialties of the [Kawamae Soran] is to introduce a creative dance in the initial part.

The theme of this year was [Kawamae Soran~Umi yo Futatabi] for conveying our feelings to the people living in the disaster-hit areas. We were motivated to incorporate and present the scene of children walking with all their strength for recovery.

Further to dancing in the sports meet, some volunteer kids went ahead and presented the “Kawamae soran” in the summer festival and the harvesting festival held in the locality. The kids were able to make the local people enjoy their dance and they could also feel that they are contributing to rejuvenate the local community. This might be a very small involvement and engagement with the local community; however, this small step would turn out to be something very powerful when the need arises.

In the class activities, the children tried to understand the actual condition of elementary schools in the disaster-hit areas “Minamisanriku: Isatomae Elementary School”, and discussed “What they can do by themselves”. In order to make

them realize how the [Kawamae Soran] would be conveyed to the schools located in the disaster-hit areas, we arranged for the teachers in disaster-hit areas watch the video of [Kawamae Soran] and their impression after dancing. We also used video message received from teachers in the disaster-hit areas during class activities.

This practice is a case example of an attempt of fostering voluntary attitude of “Helping each other, walking together” in children through collaboration between physical education, class activities, and the local community.

### II. Reality of practice

#### 1. Physical Education [Expression (Kawamae Soran)] (1) Narration of the dance

- The rich and abundant sea that supported us all along  
 This sea showed its rage that day  
 In the midst of the raging fury, we had no strength  
 We were completely hopeless, lonely and in utter despair  
 We do not know where to go and who will support us  
 Let us go once more to the sea  
 Yes the same sea. Sea of abundance, sea of wisdom  
 Again and again to the sea.



#### (2) Impression after dancing “Kawamae Soran”

- With what kind of feelings for the people in disaster-hit areas were you able to dance? (Impression of children)
- Feeling that rather than being standstill, let us slowly think about what is possible in a step by step manner. Moreover, I also danced with the feeling that if nothing is done, nothing will start.
  - I would like to think about the other person's feelings and what I can do now rather than just asking things like “Are you alright?”, “It was tough for you, wasn't it?”. I was able to dance by thinking about the volunteers and recovery activities.
  - Though I personally did not lose anything because of the earthquake, but the people in the disaster-hit areas have lost significant things and I thought that I wanted to stand up and cooperate for recovery, and with this thought I participated in the dance.

- I danced thinking about the disaster-hit areas. However, honestly speaking, we have not yet understood the feelings of people affected by the disaster.
- We don't have enough power. Though we are asked not to sympathize, we cannot do anything else but sympathize.

### (3) Relationship with the local community



[Summer Festival]



[Harvest Festival]

We feel that children have a strong liking for [Kawamae Soran] and they are now more willing to participate for the local community. The local people also enjoyed the performance of children. We think that in the emergency situations, such relationship with the local community will become a major strength.

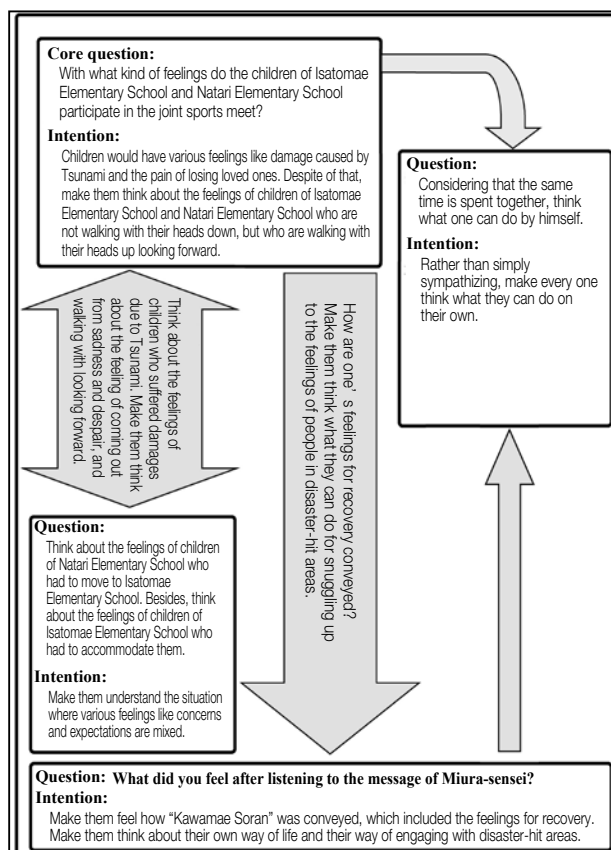
## 2. Class Room activity [Together we move forward]

### (1) Teaching Process

Stage	Learning activities and main questions	Expected comments from children and changes in their feelings	○ Points to keep in mind while providing guidance ★ Evaluation
Approaching	1. By watching the video of Soran that took place during sports meet, reflect on the feelings for disaster-hit areas. ○ With what kind of feelings could you do the Soran dance?	<ul style="list-style-type: none"> <li>• I wish to stimulate the desire to live in the people of disaster-hit areas.</li> <li>• Feeling that let us walk together.</li> <li>• I danced with the feeling that let us move forward.</li> </ul>	<ul style="list-style-type: none"> <li>○ Recall the feelings at the time of sports meet practice and at the time of the actual sports meet.</li> <li>○ Write down in the document without spending much time.</li> <li>★ Whether they could understand the direction of learning (presentation, expressions)</li> </ul>
	2. Bring up the photograph of Minamisanriku shown in Photograph 3.11. Compare it with the present Minamisanriku. ○ Explain about Isatomae Elementary School and Natari Elementary School of Minamisanriku. ○ Think about the feelings of the children of Natari Elementary School who had to borrow and jointly use Isatomae Elementary School.	<ul style="list-style-type: none"> <li>• Think about the differences with Imozawa area where one is living.</li> <li>• Natari Elementary School cannot use the school building as it suffered damages from Tsunami.</li> <li>• Feeling lonely and sad because the school building was rendered useless.</li> <li>• Concerns about the new elementary school.</li> <li>• What will happen in future?</li> </ul>	<ul style="list-style-type: none"> <li>○ In the fact-finding survey of the class, there were no children who suffered direct damages from the earthquake.</li> <li>○ Provide simple explanation of the Great East Japan Earthquake.</li> <li>○ Show the photographs of Isatomae Elementary School and Natari Elementary School.</li> <li>○ While listening to the feelings of the children of Natari Elementary School, think about the feelings of the children of Isatomae Elementary School, who accommodated the children of Natari Elementary School.</li> </ul>
Deepening	○ With what kind of feelings do you think the children would be participating in the joint sports meet?	<ul style="list-style-type: none"> <li>• Would like to give strength to people who are watching our cheerful and energetic dance.</li> <li>• One cannot remain depressed and sad forever.</li> <li>• Through this sports meet, I would like to make our school together.</li> <li>• I would like to restore the bustling and vibrant town once again.</li> </ul>	<ul style="list-style-type: none"> <li>○ In the middle where everyone is struggling to survive, make them think about the feeling of undertaking various activities with forward looking approach.</li> <li>○ By writing down in the card and by exchanging mutual thoughts, make them understand that there are diverse thoughts.</li> <li>★ Could they express their feelings in their own words? (Worksheet)</li> </ul>
	3. Watch the video message of Miura-sensei of Isatomae Elementary School.		<ul style="list-style-type: none"> <li>○ Make them listen to the video message of Miura-sensei, and make them present their impression.</li> <li>○ Convey that they are shown the video of Soran and impression of children beforehand.</li> </ul>

Connecting	4. Think about what one can do by oneself. ○ Considering that they are also living in the same Miyagi Prefecture, what kind of methods are there for conveying one's feelings?	<ul style="list-style-type: none"> <li>• Through video footage and letters, convey the elementary schools in disaster-hit areas that we are also doing our best.</li> <li>• Continue the volunteer activities.</li> <li>• Work hard for collecting donations.</li> </ul>	<ul style="list-style-type: none"> <li>○ Have individual thoughts and discuss them in pair.</li> <li>○ Ensure to discuss while thinking the situation of the other person.</li> </ul>

### (2) Intentions of asking question



### (3) Miura-sensei's message

- I am strongly moved after seeing your Soran dance. I was really happy to know that people like you who did not experience any damage have not forgotten the people like us who suffered the damages. Among several comments, there was one which said "Though we are asked not to sympathize, we cannot do anything else but sympathize". Yes, it is true that with just sympathy nothing will move forward. But there has to be a start for everything and this sympathy is a starting point because sympathizing with us means that you will not forget us. I will convey your feelings to all at Isatomae Elementary School. I would like to think about what we can do together with you. Thank you very much. (Excerpt)



#### (4) Impression after hearing Miura-sensei's message

- Though we really do not have any strength and cannot really do much, but we do want to continue thinking about the disaster-hit areas.
- Since we were not affected, we do not know much; however, we think it would have been tough for the people at Isatoma. Hence we would like to continue conveying our feelings through messages or letters praying for recovery in future.
- It is good that we were able to convey our feelings. We would like to take part in recovery related activities.
- After hearing Miura-sensei's message, I felt the importance of living and I also felt like visiting Isatoma Elementary School.
- After hearing Miura-sensei's message, we felt like we have made some connection.



#### (5) Think about what one can do by oneself

After writing the message to Miura-sensei, children started opining about "Can we not do something". Hence, they decided to set up a separate time for such discussion. It was observed that all members discussed seriously. Many opinions that went beyond our imagination such as "Isn't what we are trying to do is an unwanted favor?", "If you don't do anything, nothing will progress", "Do not want to regret for not doing anything", and the like came out of the discussion.

### III. Summary

#### Results

- By not limiting the presentation to the sports meet and by extending it to the class room activity, we were able to see voluntary attitude and expressions such as "Isn't there something that we can do?".
- By adding the narration of recovery in the dance, we were able to increase the feelings that let us express our through for recovery as the entire class.
- By showing the "Kawamae Soran" to teachers from disaster-hit areas, we felt that the distance between us and the disaster-hit areas reduced for the children.
- Since the teachers themselves were present at the disaster-hit areas, it became an opportunity to know about the reality and the present situation.
- More number of children felt the need for participating progressively in many events of the local community and importance of recovery for revitalizing the local community.

#### Issues

- We thought that connection to the schools in the disaster-hit areas has to be guarded. Not that we have to know only about the situation in our own school, but also about the schools in the disaster-hit areas.
- The practice of our school suits the actual situation at our school and this practice may be difficult in the schools which were affected directly by disaster. Hence, in the future, we would like to make efforts that suit the actual situation.
- To think about the methods that would help in understanding the internal changes in the children.

## Feelings of gratitude

Sumiyoshidai Elementary School

### I. Purpose of practice:

During the Great East Japan Earthquake, there was no major damage to the schools and the communities in Sumiyoshidai area. However, the Sumiyoshidai Junior High School could no longer be used and a corner of the Sumiyoshidai Elementary School was borrowed for two weeks' tuition. Several transfer students were enrolled in connection with the Great East Japan Earthquake.

Not limited to Sendai however, that when we think about the entire disaster-hit area, across districts there is a big difference in the status of those affected and it is a fact that the awareness of the children also vary. Regarding the content of the aid given to the Children in Sendai, the book cards received from the children showed that things such as summer drinks etc. from the Miyazaki prefecture stays alive in the memories of those children.

As for the main support of life –water, water was brought in water trucks from Niigata and an uncle who owned a store which had a well, brought water to the school.

The children has varied awareness regarding “support”, and they will get reminded of the warm support they had received from across the world and from within Japan. I had have set up this subject as I thought of nurturing children who are touched by the direct as well as indirect support they had received and who has a broader thinking and vision on things.

### II. Class Practice

#### 1. Introduction

(1) I would like to share that we received support from many people in the Great East Japan Earthquake, and I would like share the value of this time and its trends. When viewed from the situation of disaster in Sumiyoshidai district and the children has only vague image on “support”. Therefore, I would like to tell that we received support from many countries and regions.

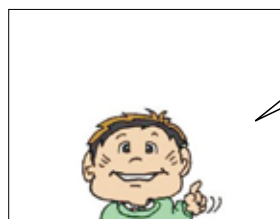
#### 2. Deployment

##### (1) Before deployment



There was a lot of support in Sendai also!!

Let us express our gratitude.



People had come from various locations for gas fitting. Quick and active support from South Korea is worth mentioning.



Since there was not much damage in our place, nobody came there.

To enable the easy thinking and understanding among children, 4 cell manga (4 panel comic) was used to make them think. The support received from the world or Japan was expressed as cartoons so as to let the children think about the feelings during that time. The important thing is to inform them about the various forms of support – direct as well as indirect support. We want the children to have a feeling of gratitude for the support they had received naturally and without being forced. Sumiyoshidai had received very important support like water trucks from Niigata, support for gas fitting from related people across Japan, etc. and the children will check these and continue learning.

It made me think as to what might be the feeling of the kid, while telling - “Since there was not much damage in our place, nobody came there.” This will be exactly the awareness of the children in Sumiyoshidai region. Since many children think in this way, at a broader sense, it is said that there can be a variety of ways as to how to support – like big or small support, materialistic or psychological support. Over and above this, as per the remarks from a girl,



we are made to think that a lot of support had been received. The difference in the situation of damage had been confirmed with everyone. Here, views like “It does not matter to us because the damage is small.” “We also wanted them to come to our own place.” “It has been a long cherished wish”, etc. had came out.



Not (enough) even if I convey my feelings of gratitude

It made me think as to why one girl has thought of “Not (enough) even if I convey my feelings of gratitude”. Based on the views of children, we can say that the children are unaware of the ways of expressing the lasting impression of feelings of gratitude in them. This view represents the voice of many more children. I took up this idea. Besides this, even if I say “Feelings of gratitude”, it is not understood fully, since it is an important aspect, it is very essential that the gratitude needs to be expressed in some form or other. If big things are not possible, small things will be fine. Apart from the Sumiyoshidai area, there were lot of areas which were badly affected and a lot of people have been helping and supporting in those areas. Since there were children who spoke that - even if unrelated to us, as children living in Sendai, we should express feelings of gratitude. Such children helped spreading this message to the entire children there.

### (3) Post deployment

A look back on one's lives.

“Is there anybody who has didn't extent support after the earthquake for the sake of everybody ? How did you feel ?” -When this question was raised, many children answered that they got support from people in the area, from the family, from relatives who are near-by or far away. In addition, great majority of the support came with the involvement of the Junior sports club association etc. Looking back, we were able to share the experiences of us being always at the receiving end after the earthquake which had made us extremely happy and which made us utter the word “Thank you”.

### (4) Conclusion

Narration of teachers

We had talked about home –visits after the earthquake. We visited every single house, and we confirmed the safety of children there. We received a lot of warm greetings like “cheers for your hard work”; “please have this for your lunch”; “teacher, you also please take care” from the people there. What I noticed there is, while we can do something special for providing support, casually conveying a kind word, or having a feeling of concern for others indeed made us all very happy. Those words and the encouragement encouraged us to visit homes.

## III. Summary

What children learned from this is, as persons living in Sendai, we should have the feeling of “Awareness” and “Gratitude” for the lot of “Support” that was received. Only that a lot of damage has happened, even though we have a crippled life, the children spoke out many of things which they felt – a kid had to change schooling from Arahama area to Sumiyoshidai area due to damage of Tsunami in Arahama area. We have realized that the difference



when it comes to the damages of disaster, it extends to heart. To make The Great East Japan Earthquake a theme for the class is indeed a very difficult thing. However, the actual voice of the children who had been through a lot of experience had been conveyed to everyone and which made those people think, is an important aspect. The direct and indirect experiences of the children will make them “Story tellers” in the future and it is essential that they should have the awareness. One thing we should be careful here is to limit with the children who are ready.

It is difficult to make children aware of themselves. It is necessary that we, as teachers, should be sensitive. We need to be clear on what we want to make the children think about and we want to work in the daily classes about the same. I think that will be the mission of a teacher who has experienced the Great East Japan Earthquake.

## Cleaning Activities Learned from Experiencing the Earthquake

Rokugo Elementary School

### I. As a peaceful living environment

Rokugosho (The Rokugo Elementary School) was not directly affected by Tsunami because the eastern road served as a breakwater for Tsunami. However, cracks occurred here and there in the school building, and the school gymnasium was rendered useless.

People had been evacuated primarily from the eastern road to the area in the eastern side, which were severely damaged, and it was a 35-days evacuation operation.

In between, by borrowing the strength of many volunteers, in a crippled situation, we have been working for maintaining a peaceful living environment. In that, we cannot miss the daily cleaning activities which are essential for a comfortable sustenance.

I want to introduce to the children and teach them a 'food for thought', the human charm learned through cleaning and the emotional connection.

#### 1. Fight for toilets – Step 1

— Fight with one's feces and urine —

In the shelter where there was no power and water, something that we had feared came true. The toilets which do not have water will have pile of feces and urine. Even displaying posters at the toilets about 'No water, toilets cannot be used' were not effective. There is no other choice, but to remain as a mere spectator. There is no other way, but to take the excreta. Mr. T who is in her 50's had volunteered. Two other teachers who were in their 20's followed the suit. Will there be anybody who might wholeheartedly like to process and clean up excreta for the 'fun' of it? My head really went down in shame.

People from the relief squad which had rushed to the spot from Shizuoka said that "We think that the first and foremost thing which we will be doing is toilet cleaning". The first and foremost thing which was done for the Great Kobe Earthquake was developing and preparing the toilets". I was surprised.

Here, even if I wanted to avert my eyes, I had witnessed the splendor of those teachers who had

taken the initiative and worked on. Children, who had been watching all these, had united as a single group and were willing to get soiled and become dirty. They no longer had to shout 'hey (ready to) be dirty'. It was as if the feelings of teachers were conveyed to children as well.

#### 2. Fighting for toilets – Step 2.

— Meeting to learn from Miyagi cleaning —

The ground fell down considerably after the earthquake. The effect is seen in toilets, the water did not run out smoothly, bad smell was coming back as a reflux, and each time we were forced to repair the toilets. Under such circumstances, during September of the Japanese calendar year, all the 300 members of the "Meeting to learn from Miyagi cleaning" had visited Rokugosho (The Rokugo Elementary School). All the toilets were sparkling clean and shining giving an ultimate impression.

We may not directly look up to children to do cleaning on Sundays, but, it was noticed that immediately after the school hours, the toilets were not the same.

These activities were told to the children, photographs of cleaning were posted to them,



State of activity of everyone involved  
in the "Meeting to learn from Miyagi cleaning"



whereby all the children were told not just in words, but were shown the visuals as well.

The photographs displaying "toilet bowl cleaning in process" notices were being posted at all the toilets and the plates having the wordings "if you pick one toilet, you can clean only one" were posted in classrooms and hallways.

The initiatives to promote the toilet cleaning which people dislike, had appealed the minds of each and every child. At the same time, for the classroom guidance and for moral studies in the morning meeting, it was picked up as live teaching material so that each and every child could sense the thoughts behind the teachings.

## II. Efforts for silent cleaning

### 1. Background

#### (1) do not want to do troublesome work

As the upper school year students do not want to do troublesome work and there are many cleaning places for sharing, it will be difficult for the teachers to be everywhere and give instructions. When teachers are not there to instruct, things are left to your friends and they might want to take responsibility of easy tasks which might not dirty your hands, like that of dustpan, chopsticks etc. It is children's honest feeling to take up slightly easy tasks.

#### (2) Slow cleaning

At this school, the cleaning is done after the class hours. It is difficult to carry out vacuum and cleaning during the prescribed timings, after school hours and due to this, returning from school may also be late. Because of this, it can be seen that children lack the awareness of focusing their efforts and doing things in a short time. In addition to, this we also came across children, who after completing their share of work, will get into chatting while simply looking at the others working, rather than helping others. Of course, these things will become negative factors and indefinitely keep on having lazy cleaning without any distinction and wanting to somehow complete the cleaning work faster, might end up in too much of a sloppy cleaning.

### 2. Proposal from the committee

#### (1) Recognition of cleanup activities

After the earthquake, various schools and organizations encouraged and supported us. The Planning Committee issued a suggestion to think

about how to appreciate this.

In response to the agenda, the learning meeting of Miyagi cleaning which have been done from the class at Rokugosho (The Rokugo Elementary School) may be one such initiative aimed at adding courage to those who strive hard to withstand the earthquake. It is very important to write a letter expressing gratitude. However, it is also important to think about how to respond to the feeling of those people when they continue doing their best to everyone in Rokugosho (The Rokugo Elementary School). One opinion was that the best way of response can be to clean up one's own school.

#### (2) In order to make a cleanup activity active

How to do activities for the entire school to get good results, was discussed in the representative committee. As a result, it was decided to go ahead with the following proposal.

- ① Do the cleaning without talking.
- ② Poster to be posted for each class to be prepared. In the lower grade classes, the report bulletin prepared by the upper grades will be shown.
- ③ In order to finish the cleaning activities within the stipulated time, a BGM is played during the cleaning activity hours.
- ④ Purpose of Silence cleaning will be appealed through broadcasting of the day.

Like this, the importance of cleaning will be made aware to the children. For the entire school, together we started the silence cleaning.

### 3. Cleaning activities of three different grade students' interactions.

#### (1) Cleaning interactions

1<sup>st</sup> year students were in-charge of cleaning after the summer vacation. In this school, the cleaning activities were found to be inadequate. Hence, for the 1st year students, after the summer vacation, the know-how of cleaning together was shared. The upper grade students supplemented where 1st grade students could not handle on their own. Also, the interaction through cleaning became lively.

#### (2) Reliance of upper grade students

When someone is relied upon, that person would hesitate to take irresponsible actions. Even areas where people usually do not dare to be mentors were now seen taking initiatives and getting involved. From

this perspective, interactive cleaning among people had positive effect on them.



State of cleaning activities



Discussions on cleaning activities were made at the representative committee and while planning the reviews, effective cleaning activities were kept alive.

### III. Conclusion

The Rokugo Elementary School had experienced the great earthquake and the entire school was converted into an evacuation shelter. Even though cleaned again and again, the corridor became pure white with dust and sand. For evacuees to be comfortable, hygienic cleaning is indispensable. Cleaning was done every day with the support of so many volunteers. When the school was reopened, even though from a crippled condition, the school educational environment was recovered and kept ready for the students.

The repair work of the school was being performed even after it was reopened for the classes, and this imbibed the reality in children that everyone has been willing to support. Although it gave grief that the disaster was unprecedented, it can be said that it taught us to review again the most basic cleaning. I think and I hope that in the future we need to come together with the children and put emphasis on cleaning and purifying the heart and mind.

## Komastushima - Project on “Let us link the memories of that day to the future.” ～Home Town Recovery Project:Committee: Lunch committee tie-up plan～

Komatsushima Elementary School

### I. In order not to forget that day

On the night of March 11, 2011 (Year 23 of Japanese Calendar), nearly 1500 refugees had been evacuated to the school compound including the playground of the Komatsushima Elementary School. A week later, the number of refugees reduced to half, but still the people had to continue fighting against the shortage of food and energy (power). The situation in every family of the children of Komatsushima Elementary School, and also in any family of the Sendai City was thought to be the same.

However, it will soon be two years since the earthquake. We must work together and we must help each other. I feel that if we work together, the memories of not getting anything to eat and if we help each other, the memories that I could not overcome that day will get faded. On the other hand, in the region that was damaged by Tsunami, even now there are areas and home which does not have the prospect of recovery.

Regarding the disaster in Sendai, for the children who grew up there, the memories of that day have not weathered from their minds, remembering the support received from the entire nation. As children you might want to grow into adults who will actively take part in the restoration and recovery of the Tohoku region which will continue from now on.

With such a request with a focus on March 11, at this school, the planning of home town recovery project of one's own school have been done.

### II. Regarding plan and practice

#### 1. Initiatives in 2011

By using the lunch time in the year 2011, people have been working on the theme of mainly the “Importance of food”, the “Importance of helping each other” (March 11, 2012 Implementation)

##### (1) Aim

To nurture feelings of cherishing the food, recalling the time during the earthquake, when even less amount of food was divided and shared among people.

##### (2) Menu

- Gomoku rice or alpha rice

- Hassaku (orange) · Bean soup · Milk

##### (3) The letter to a child (from lunch room)

“We eat to live”. ～It is not allowed to neglect food.～

..In order to live, you must eat food. Simply because we have experienced the loneliness and hardships of lack of food, not only the bread and milk for school lunch creates nostalgic memories to us but also we want to go ahead valuing and cherishing the food that we eat.



Lunch on March 11, 2012: The ‘suito’ prepared at each shelter was the staple food.

#### 2. Initiatives in 2012

The initiatives of 2012 were in addition to the efforts of 2011. With the help of the local residents and volunteers who were instrumental in the management of shelters during the earthquake, further a trader with the help of whom ingredients were provided to the school, a practice plan for moving the hearts of children is being made.

##### (1) Special school lunch menu (3 days)

The menu will be set in accordance with the contents of the reports heard by guest lecturers during broadcasts aired within the school.

Month Day	Menu	Content of Activities
March 8, 2013 (Friday)	(from the diet in the refugee shelter) · Wakame Seaweed rice (Alpha rice) · Bread · Hard Dry biscuit · Banana	· The alpha rice which was the main food at the refugee shelter was shared and eaten by everyone there.
March 11, 2013 (Monday)	(Turkish cuisine at each refugee shelter) · Lentil soup · Shish Kebab	· Each refugee shelter with people of Turkey around them and having served the Turkish cuisine. · It was noticed that the people were helping beyond country borders.



March 12, 2013 (Tuesday)	(After the earthquake, first full menu of lunch time) · Meat and potatoes · A dish dressed with Sesame sauce · Rice · Acerola jelly	· We remember the day when we could restart having a full meal. · You know about the existence of people who had lost everything, and having a full meal lunch restart seemed grateful.
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## (2) School broadcasting during lunch time

People who are doing the refugee shelter administration or people who are committed to the restoration and recovery will be asked about their stories in interview format. The lunch interview committee and the home recovery projects need to be done by children of the committee. The recording is performed during February, editing will be done in 10 minutes and it will be broadcast during lunch time. The content of each meeting is as follows.

Month Day	Guest Teacher	Contents
March 25, 2013 (Friday)	(Shelter Administration) Union Neighborhood Chairman Nemoto sama  Social Worker and Child Committee member Saito sama	· Problems encountered during Shelter Administration and useful things that saved. · Who had prepared the meal for the refugee shelter? Things when shared to a large number of people. · About saving the thermal energy while preparing food.
March 11, 2013 (Monday)	(Volunteers) Listen to what the Turkish people are telling.  (Sendai Turkey Association instructor request)	· Regarding a story which is mentioned in the textbooks in Turkey when about nearly 100 years back in Turkey the Japanese people had helped with a ship wreck. · What might be the thought of refugees in the shelter? · Message for the children in Tohoku.
March 12, 2013 (Tuesday)	(Caterers, Own plant affected by the Tsunami) Sanwa Firm, Sugata sama	· When the plant was washed away, have you thought how to try and reconstruct it? · While making jelly after the earthquake, what did you find was the most difficult thing?

## (3) March 11 (Monday)

Initiatives during morning activity time

March 11, 2013. As on today, 2 years have passed since the Great East Japan Earthquake. Two years from that day, the restoration and recovery work has

been addressed in the work for local residents. The story of these local residents were broadcast as a video, and one should take a new determination that one should cherish one's own life and spend each and every day working hard with one's might.

### ① It depends (located in each classroom)

- A Speech from school principal
- A Video message by local residents
- A Report on efforts for the year from the home recovery project committee
- Concluding words

### ② Interview of local residents

Guest Lecture

a) Komastushima Sports Promotion Board, Ms. Daiga (Gas Agency)

- Regarding the situation of supply of gas in Sendai City at the time of earthquake.
- About the feeling when propane gas and kerosene were delivered the refugee shelters.
- How is the recovery work different from the usual work?

b) Komatsushima Sports Promotion Board Ms. Shoji (Building stone processing industry)

- Regarding the situation of supply of temples and tombs in Sendai City at the time of earthquake.
- Information on how we repaired tomb of Manjuji. Also, with what feeling did we address that.

※Common: To the children of Komatsushima Elementary School: How do you want to grow up? Also, how do you want to get involved with the local community?

## III. Summary

The activities during lunch time will be carried out with the local community from next year onwards with widening the (scope of) the contents. I hope that, observing the community without forgetting that there is a school life today, without limiting the help and support to earthquake alone, children should be able to grow as adults who could go on reaching out to and helping those in need.

## The Disaster Risk Reduction Classrooms One Year After The Great East Japan Earthquake

Fukurobara Elementary School

### I. Purpose of Practice

The Great East Japan Earthquake changed the evacuation drills conducted at the schools such that students can be prepared for Tsunami as well.

Therefore, one year after the earthquake occurred, with the purpose of further enhancing the disaster prevention awareness in children, we decided to conduct disaster risk reduction classes.

### II. Reality of Practice

1. Date & Time: March 9, 2012, Friday, 8.25 to 8.55

2. Schedule and Contents of Activities

(1) Earthquake Early Warning Drill (By watching Television)

Assumptions

- ① Emergency flash warning of earthquake is issued. It is expected that earthquake will strike, and therefore it is necessary children as well own self.
- ② After a few seconds earthquake occurred. Since there is a risk of damage from the earthquake, it is essential that children are evacuated. → This time, we will not do the actual evacuation.

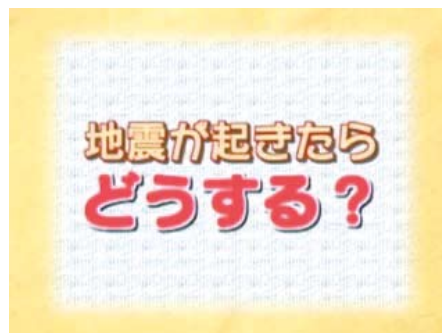
- ① "What is this emergency flash warning of earthquake?" "How should I act when I hear the emergency flash warning of earthquake" - I will explain these with a video.
  - ② When you hear an "Emergency flash warning of earthquake", protect yourself by hiding under a desk.
- ※After the animation on shaking of the earthquake, after 10 seconds, earthquake occurs (Sound effect is broadcast)
- ③ Listen to the broadcasting at the end of drill.
- "The earthquake had subsided. Normally, people will be evacuated to the school playground or the roof. Today, the drill ends here."



- (2) School Principal's speech and silent prayer
  - ・ The meaning of today's activities will be explained and for those who have sacrificed their lives in the recent disaster, let us pray for 1 minute and observe silence for a moment- May their soul rest in peace.
- (3) Video viewing (Mode of evacuation in case of an earthquake) 5 minutes

Watching video: Produced by Fire and Disaster Management Agency. Year 2008 Disaster Prevention Learning video. "It's an earthquake. What to do then? Let's protect ourselves and, together let all of us help each other."

- ※ One the contents related to the children were and summarized into approximately 5 minutes video.



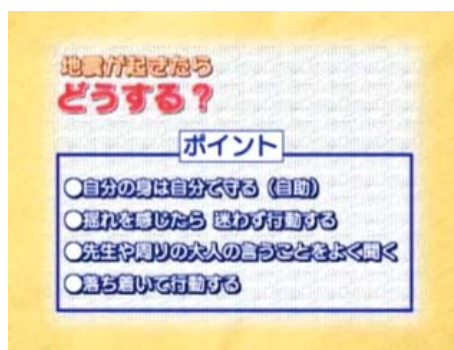
It's an earthquake. What to do then?



Save yourself



Save yourself



Video screen

## (4) Explanation of brochure

“To protect oneself from earthquake and Tsunami”, Sendai City Board of Education had issued a Disaster Prevention Learning leaflet. While looking at the photos in the leaflet, the following aspects were explained:

- ・ The procedure for safe evacuation
- ・ What I want to discuss with my family

These aspects tell us to discuss about disaster prevention at home.



Disaster Prevention Learning leaflet

かぞく ほな み  
**家族で話し合い  
チェックしてみましょう**

子どものチェック

☐ 家にいるときに、地震の発生や津波警報が発表された時の行動や避難所などを確認しておきましょう

避難所名 ▶

☐ 家族それぞれが外出先で被災した場合の集合場所を決めておきましょう

集合場所 ▶

☐ 電話が使えない場合の互いの連絡方法について決めておきましょう

連絡方法 ▶

親のチェック

Check list for evacuation

## (5) Introduction to efforts for reconstruction 5 minutes

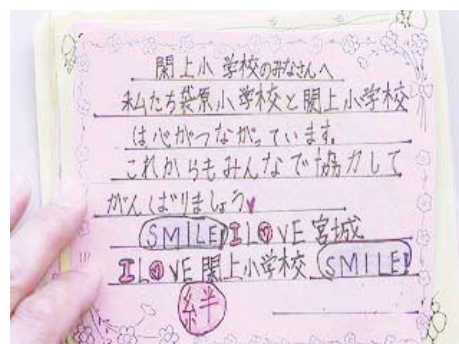
It introduces the “Milk pack project” done by 2 classes of 5th grade wherein milk packs were used as piggybanks for fund raising.



First, let me introduce you to the current state of the disaster-hit area of Yuriage.



Present to the Yuriage Elementary School



Letter to the Yuriage Elementary School





Milk carton collection box

(6) End of broadcast

(7) Class guidance

- Class guidance was done leveraging “Our safety” and covering instructions on how to do evacuation and regarding the evacuation shelters.

### III. Summary

One year has passed since the earthquake; a variety of information had been published in the TV and newspapers, magazines etc., which had caught the attention of the children as well. At school, there are many children who are unexpectedly indifferent. I think the activities conducted this time might be a good opportunity for the entire school children to have a self retrospection again about the earthquake meaning to have a look back at the earthquake. In particular, I feel it is a significant aspect that I was touched by the aspiring activities by the familiar 5th grade students. In the future also, we need to think of similar activities enabling the children themselves to become aware of the importance of protecting themselves on their own. Such activities need to be devised and more importantly continuous practice need to be ensured.

## By Conducting Joint Disaster Risk Reduction Drills in Schools, PTA, and Local Communities

Kabanomachi Elementary School

### I. Introduction

The Great East Japan Earthquake which had occurred on March 23, 2011 2:46 PM, from Tohoku to the Pacific Ocean side of the Kanto region, the big shaking caused by the earthquake and the big Tsunami that followed, had caused severe damage.

On March 11, 2011, on the day of the earthquake, approximately 1,700 local residents were evacuated to this school building and gymnasium of the school. Initially, during the earthquake disaster outbreak, under the instructions of the School Principal, mainly the school faculty and staff started the refugee shelter center and performed the refugee shelter operations and administration. A locally owned Shelter Steering Committee, which was set up on the third day of the earthquake, moved smoothly from the school to the area. With the cooperation of the local residents, the faculty was able to work towards reopening and resuming the school from March 22, 2011 onwards. The school building of this school and the gymnasium was made the refugee shelter till July 2011 end. This school is located in the Wakabayashi ward in Sendai. Although the area was spared from damages of Tsunami, it suffered heavy damages from the shaking of the earthquake. The ground was sinking, and the new school building which was an extension of the old school building got displaced vertically by about 20 cm. A very big step was formed in the hallway of the school building. After the disaster, there was a risk of collapse of the school building, and therefore



the entry to the school building was restricted.

The school building, gymnasium, and martial arts gymnasium of the Kabanomachi Junior High School were rented for resuming the school.

In November 2011, a temporary school building was completed in the school compound of the school and from that day onwards, till today, classes are being taken in the temporary school building.

In 2011, as per the school evaluation questionnaire etc., after the Great East Japan Earthquake, need for conducting "Joint disaster management drill along the region" has increased from faculty members, parents, as well as local residents. In order not to waste the experiences of the Great East Japan Earthquake, it was decided to implement a "School, PTA joint regional disaster management drill" as a school event, during the year 2012.

### II. The aim of the "School, PTA joint regional disaster management drill"

The following three points were made the aim of the "School, PTA joint regional disaster management drill."

- In cooperation with the three parties including the school, the PTA, and the community in the region, emergency drills need to be performed, assuming that a big earthquake disaster has happened. By performing such drills, the awareness of the children and local residents for "self-help" and "assistance" of the local residents will increase.
- Through the drills, children can learn the way of providing refugee shelter support or initial response during an emergency disaster.
- We will promote "Building a strong town against disaster", which can respond systematically to an emergency disaster and checking the role of the school, the PTA and the region or the community involved.

### III. "School, PTA joint regional disaster management drill."

1. specific date

July 8, 2012, Sunday

10.00 AM to 12.00 AM

## 2. Assumptions

During school hours, an earthquake disaster of magnitude 6 (high) has occurred with Miyagi Prefecture as the epicenter. Safe evacuation of the local residents and the children, and quick setting up and opening of the refugee shelter is necessary.

## 3. Sponsors and Partner organizations

### (1) Sponsors:

☐ Sendai Municipal Kabanomachi Elementary School

☐ Kabanomachi Elementary School PTA

☐ Kabanomachi Elementary School district neighborhood association

### (2) Partner Organizations

◇ Shichigo Union Neighborhood association for Security, Disaster prevention

◇ Shichigo Firefighting branch office  
(Kabanomachi firefighting team, Kasuminome firefighting team)

◇ Union neighborhood association woman fire prevention club

◇ Kabanomachi Sports Promotion Board

◇ Kabanomachi Elementary School support regional headquarters

◇ Sendai Kabanomachi School District Child Welfare Council

◇ Sendai Wakabayashi Fire Department

◇ Sendai Wakabayashi Ward Office

## 4. Implementation Content

### (1) Evacuation drills for children and parents, evacuation drills for local residents.

Implementation of school emergency mail delivery training.



State of the evacuation of local residents

### (2) Joint Disaster Management Drill

The Parents and the children, jointly with the local residents, participate in the following drills:

① Firefighting drills

② Smudge (dense smoke) experience

③ Report drills

④ First Aid drills

⑤ Emergency rice feeding drills

⑥ Distribution drills



State of emergency rice feeding and distribution drills

### (3) Collective drills on Dismissal from school:

Joint drills with local residents, school children, parents. Local residents to visit to see how the dismissal of school children is done.



State of Collective dismissal drills

## IV. Summary

### 1. Results

#### (1) From children

◎ After the siren went tool, until evacuation from school compound took 4 minutes 1 second. Earlier, this was five minutes; however, since everyone took it seriously, the evacuation time got shortened. We felt once again that it is essential to be serious about drills, in order to protect one's own life from disasters such as major earthquakes.

◎ By participating in the food preparation and distribution drills, I understood how to make 'Onigiri' (rice balls) of alpha rice. Hence, if and when such a major earthquake occurs in future also, I want to work as a volunteer on such food preparation and distribution drills.

#### (2) From the faculty

◎ With the first round of implementation, the flow of a joint drill with the local community became clear. I think we can connect this practice to the next year also. We think that the cooperation of the sponsors and partner organizations was also a success.

◎ It is indeed good that the children have been able to experience various types of drills in a short time.



It turned out to be a forum where each and every child could experience the disaster drills.

(3) From the PTA

- ◎ Being in charge of the distribution drills and also the activities of 5-6 years old children, the implementation could be carried out very smoothly. On the whole, we were glad that we could afford to spare enough time.

(4) From the local residents

- ◎ Carrying out emergency drills jointly with the school and the local community has turned out to be extremely effective for the regional development in future.
- ◎ We were able to perform the confirmation of the door to door safety, correspondence to the persons requiring assistance etc. in each neighborhood. There was also a neighborhood association in which residents of nearly all households participated wherein growing awareness on disaster prevention and refugee shelter administration was realized.

2. Issues

From Review of faculty and district and from the evaluation meeting of the district and neighborhood

association and PTA, the following four points were mentioned as tasks for working in future:

- (1) With the cooperation of the Junior high school district (Yamato Elementary and Kabanomachi Junior High) and the cooperation of the Shichigo Community neighborhood association (Shichigo Elementary and Shichigo Junior High) .
- (2) Merging the disaster prevention manual between school and the local community.
- (3) Public relations and ingenuity in the form of participation that could ensure more participation from parents and the local residents.
- (4) Detailed and complete eradication of issues and the clarification of the aim of the disaster management drills for next year:

Towards the next year, these problems will be solved and we want to be able to continue the regional joint disaster drills along with the local community, the school and the PTA.

## Conducting Disaster Risk Reduction Classes for the Entire School ~Regional School Events: “The School Disaster Risk Reduction Open Class Day (each subject)”~

Shogennishi Elementary School

### I. Regional School Events “Open Class Day (each subject)”

### II. Participants: Grade 1 to Grade 6 students, special support teachers for each classroom, small group guidance teachers

### III. Conducting the classes (30<sup>th</sup> August (Thursday))

“Open School Day” was conducted towards the end of annual summer vacation and the location was the kitchen of one’s home.

We conducted the classes for the purpose of “Gaining knowledge about how to protect the life, what to do in order to protect the life, and how to think and act when a disaster strikes”.

In addition to this, by implementing these things in the ‘School Open Day’, the parents also got to know about the contents of the learning, so that they could discuss and think together at home, this helped in increasing awareness about disaster management at home.

#### 1. Subject “Class Activity” 1, 2 groups of grade 1

(1) Title: “In order to protect life”

(2) The main learning contents

- ① Discuss on the basis of the questionnaire on the things during an earthquake disaster. In addition to this, know about what actions to take in the event of a disaster.

※ Questionnaire: “I was afraid”, “I was thinking what to do”, “I did not know what I should do”, “I hid under the table”, “I ran and escaped” etc.

- ② To provide guidance for important points. “Get under the desk”, “Protect your head”, “Do not move till the shaking subsides”
- ③ To guide that keep talking to people at home is important.
- ④ To check your school route using disaster prevention maps.
- ⑤ To guide to leave a building or be away from a high block wall, and to go closest to your home or school.

- ⑥ To guide to calm down, relax and listen properly to what adults or elders say is an important aspect.

#### 2. Subject “Class Activity” 1 group of grade 2

(1) Title “Protect yourself from earthquake”

(2) The main learning contents

To think about how best we should act when an earthquake strikes while we are at home. In addition to this, we will think about what all things we should essentially be equipped with during the event of an earthquake disaster.

- ① “Look out for dangerous places, dangerous things”.
- ② Things that may be broken, that may fall, and that may cause an injury and places where fire is likely to occur will be input in the worksheet.
- ③ We need to think of ways of reducing risks of injuries, fires from happening.
- ④ We need to get reminded that it is important to get equipped on a day-day basis.



State of the class of grade 1 students



State of the class of grade 2 students

#### 3. Subject “Physical Education” 2<sup>nd</sup> year 1 set, 3<sup>rd</sup> year 1 set, 4<sup>th</sup> year 1 set, Izumi class.

(1) Title “Swimming dresses”

(2) The main leaning content

- ① To know how to protect oneself from hazardous

conditions like river, sea.

- ② To guide to experience as to how to help float one's body for a longer time, by using familiar things like a pet bottle.
- ③ To remember the difficulties and the sense of the body while entering a pool and swimming in plain clothes. To experience that 'Flutter Kick', 'Crawl' will be easily exhausting making it hard to swim.
- ④ To think about what to do to support the body in water.
- ⑤ To learn how to do 'Otter float' and 'Back float'
- ⑥ To introduce how to rescue using a wooden stick and feet.
- ⑦ To try to practice undressing in water. You can take advantage of this and the clothes you took off will act as a float that is used in water and help in rescuing.



Practice using pet bottle.

#### 4. Subject "Class Activity" 1 group of grade 5

(1) Title: "Get ready for the disaster".

(2) The main learning contents

To think about what all things should we put in the 'Disaster Prevention Backpack'. Taste 'Alpha' rice.

- ① Think loud as to what all things we should put in the 'Disaster Backpack' and most importantly why we should put those things in the 'Disaster Prevention Backpack' bag.
- ② We need to think about what all things are really important to be out inside, since the contents of the 'Disaster Prevention Backpack' bag is limited.
- ③ We need to get reminded of the need to "Protect the life". To check that we do not need things to play.
- ④ To taste alpha rice together with everyone who is coming to visit.
- ⑤ To be interested in the emergency food: To know that there are different types of emergency food.

#### 5. Subject "Class Activity" Group 1 of grade 6

(1) Title: "Let us have a look back at the earthquake"

(2) The main learning content

Looking back at the earthquake, we know how important it is to prepare, and let us discuss the mental attitude in the case of emergencies.

- ① Look back at the state during the earthquake, using a power point, or photo or displaying a newspaper article.
- ② Think what kind of preparations are required for protecting life.
- ③ To conduct group discussion on the contents of Disaster Prevention backpack bag.
- ④ To conduct group discussion on the mental attitude during the earthquake.

What the children thought

- ☐ To protect oneself
- ☐ To protect one's family
- ☐ To prevent fire from happening
- ☐ To evacuate to a higher ground during tsunami
- ☐ To prepare and keep the disaster bag
- ☐ To act in a calm and composed manner

#### 6. Subject "Class Activity", 2 Groups, Grade 6



State of group presentation

(1) Topic "Know about the earthquake, get ready for the disaster"

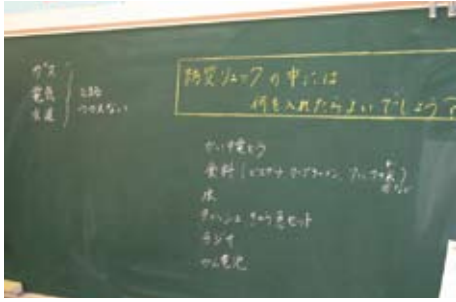
(2) The main learning content

To know about the mechanism of occurrence of earthquake and Tsunami.

In addition to this, think about the attitude during an earthquake and the things required during an earthquake.

- ① In future also, the first and prime-most thing to think about is to protect oneself after definitely confirming the occurrence of an earthquake.





What are the contents of the disaster prevention backpack?

- ② To learn the mechanism of how an earthquake and a Tsunami occur. (Use Television for this)
- ③ Think about the mental attitude during the disaster and fill out the worksheet.
- ④ Think about what all things are required during the disaster and fill out the worksheet.

What the children thought?

- ☐ Fix the bookshelves or furniture properly so that they will not fall.
- ☐ Prepare and keep a disaster prevention backpack bag.
- ☐ Think about power failure and get prepared for it.
- ☐ Prepare and keep food for a few days.

#### IV. Summary

School class visits (school open day) have been done on a regular basis for the whole school. Among the visits, this time “Disaster Prevention” was the theme for each grade student and classes were conducted considering the children and their developmental stages. This time, the school open day was a free open day and so many parents showing a higher interest and also many students irrespective of their grades, had visited this school open day.

We feel that we were able to display that, when you say the one word “Disaster”, it should be seen from various perspectives. We had been able to carry out various lectures with the teaching contents regarding before the earthquake; when the earthquake strikes; what all things happened after the earthquake etc. We think that this has also enlightened many parents, and it is confirmed that they have also felt the need and importance of daily discussions on this in every family.

There was effect of the ‘School Open day’ teaching practice, which involved the parents. However, challenges still remained as to whether this has just promoted a systematic nature, or has it served in lines with the actual situation.

## Grade 6 “Comprehensive School hours” “Learning from the earthquake”

Higashirokubancho Elementary School

**I. Beginning of learning**

We studied about the earthquake during the comprehensive learning hours of 6<sup>th</sup> grade students. Almost all the children were in the classroom at the time of the earthquake. There are children who have been evacuated to other prefectures since their homes suffered damages. Their relatives in Ishinomaki and Kesenuma were also affected by the earthquake. Life will gradually go back to normal. However, a new school term which is clearly different from before has begun. We began learning while thinking about how to accept the earthquake. The study was aimed to learn about the damages of the earthquake, notice about people who are working hard towards reconstruction, and to think about their own life and behavior of the future.

**II. Practice**

1. To learn from news coverage of the earthquake
- (1) Stage to find out about the present condition and facts

When we started reading newspapers, children wanted to look into the following items in detail.

- |                   |                              |
|-------------------|------------------------------|
| 1. Radioactivity  | 2. Agriculture and Fisheries |
| 3. Reconstruction | 4. Disaster prevention       |
| 5. Volunteer      | 6. Playground for children   |
| 7. Evacuees       |                              |

When we continue to read, we would notice the tough present situation which is completely different from our lives.

- (2) Stage of moving the focus on people

A child who had read a newspaper article on the farmers who had suffered from salt damage, had the following question: “Rather than giving them up, why are they saying they would like to reproduce the fields although it is tough to do so.” In addition to this, another child was shocked to read a newspaper article on a worker at the nuclear power plant area saying, “Even though I work in order to prevent and control the damages, the situation is not getting better. This does not lead to helping people. It is

frustrating.” The child was quite moved by the words in that article and was able to guess the feelings of the worker. While sharing the aspects that were examined, the issues changed as follows:

- |   |
|---|
| 1. “People who serve to support the others as their occupation”   |
| Medical, Media, Disaster prevention research, earthquake research, fisheries, public institutions, companies. |
| 2. “People who live as evacuees and volunteers”   |
| Volunteer activities  |
| 3. “People working on energy problems”  |
| New energy development and power saving   |

2. Learning from people who stand against the earthquake

- (1) Stage where the learning target takes shape

A person, who had faced the current situation in the affected areas as an announcer, contributed an article and it was published in a booklet called “Sendai Studies”. A child introduced this article to the class. From these words, “What can you do as an ‘announcer’? I just have to do what I can do with a microphone. That is my duty.” The children and the teachers strongly felt that they want to hear to more details.

The children who were examining other issues also felt strongly that the more they examined, the more they wanted to know the details and the more they wanted to hear directly. So the community support coordinators have been writing letters to lecturers, getting in touch with them while explaining the purpose and they were able to set occasions where the lecturers were going to teach.

- (2) Stage where thoughts have deepened after learning from the lecturers

- ① Tanaka san (Foreign Language Activity Volunteer)

He evacuated to Sendai from the town of Namie, and while working, he has been doing Foreign Language Volunteer activities at the Higashirokubancho Elementary School.

While explaining the sequence of events from the

occurrence of the earthquake until evacuation, he told us how painful it is not being able to return to his hometown, but even then, he was still trying to move forward. He added, "I do not want you to forget the earthquake".

② Ebi san (Chairman of Community Neighborhood Association at the time)

At the time of the earthquake, he launched a Disaster Response Headquarters and ran shelters in the region, in cooperation with the local community. He spoke about the consideration that people had shown, even at the time of emergency and he was quoted saying "I want everyone to cherish the kindness as a Japanese"

③ Wada san (Announcer)

As an announcer, Wada san went to do the coverage of the affected areas. She talked about the effort she made to tell the fact such as the junior school and the high school students were thinking and acting on their own, and what types of support were needed in what kind of place. Her message was that she wants the children to be involved in disaster prevention on a regular basis and to take lead in becoming evacuee.

④ Akamastu san (Resident doctor in the area)

He arrived quickly at the hospital at the time of earthquake, and cared for the patients. He told us that due to power failure, operations were only performed in emergency. He also said that they struggled to prepare meals for the patients but they overcame this by working together. He said, "I want everyone to work together as well."

⑤ Terada san (Announcer)

At the time of the earthquake, he continued to report the coverage of the affected areas. He told us that thought about what he can do under the unimaginable situation, and he has realized that he duty is to tell everyone the situation over microphone. He said, "I want you to to raise the antenna to watch the news. Please continue to research about the earthquake and play a vital role in the reconstruction."

⑥ Makuta san and Taki san (Electric power company staff)

They were in the Onagawa Power Plant when the earthquake occurred. They spent the time at the power plant which was the evacuation shelter. They spoke about the sequence of events until power restoration, and also explained regarding hydro and

thermal power generation. Finally, they said, "We feel that people are starting to forget about power-saving. We want you not to forget about it."

⑦ Ise san (Support volunteer)

He continued his support to an island which he had some connection with when he found out about damage condition of the island at the time of the earthquake. He mentioned that continued support is required, instead of saying "good luck" to the people in the affected areas, we should do our best ourselves and continue putting efforts. He also said that it is important to be with the hearts of the people who are affected by the disaster.

⑧ Kusaka san (Farmer)

His family has been doing farming with a side job and he has also been making rice. He told us that after much agonizing due to the impact of the nuclear accident, he had finally decided to migrate to his wife's parents' home (in Kyushu), who runs an agricultural business.

At the end, he told us that "How you live your life from now on is important. Rather than thinking that you have failed, it is important to start again."

3. Think about what you can do yourself -Stage you act out

The children were in gasp while listening to the story of lecturers, and it seemed that the children were in a state that even though they wanted to convey their feelings, they could not put it into words. From the learning, the children realized the heaviness of words and the significance of learning from the people. The children received the message from the lecturers, and they thought about what they can do themselves so that they can put that into practice during the winter vacation.

There were children who had visited the disaster-stricken area, and had made reports on what they had seen in front of their eyes. Some other children had done the fund raising and had checked how their donations are being used. There were also children who continued reading the newspaper, and cut out items from the newspapers. Some children thought that it is important to greeting people, so they continued to greet people in the neighborhood.

At the end, they wrote a letter to the lecturers. They have managed to express their feelings using their own words which they could not express at the time



of the lectures.

### **III. Discussion**

We took the following steps; to know, to examine, to meet people, to reflect on oneself, and to act. We continued our study while listening to words and thoughts of the children. All we needed at the time was to get it checked against the target and to put enough time. Through this practice, we thought about the role that teachers should play. This involves making connections between the children and the local people.

During the learning process, there was a time that we thought about the reason why the lecturers agreed to tell us those stories. For instance there were occasions when things were hard and tough. But the lecturers did plenty of preparation to decide on what to show and tell us during the limited class time. We had felt that they had a compelling feeling to express their experiences and thoughts to the

children who will bear the next generation.

During the lessons where the children face each other and exchange words, we have seen moments where the children were interested in the other party involved and tried to live up to their expectations. It is great to learn from people. People who are close to the children that can provide learning to them. I believe that one of the roles of the school as well as the teachers is to set up a place where both can meet to get a learning experience that moves their heart.

It was a process of trial and error, but the things such as “compassion”, “ability to take action” and “way of life” learned from familiar people were engraved in the minds of children. The road to recovery is long; however, this learning experience will surely become a driving force for action for the children in the future.

## Comprehensive school hours — “What we can do -Recovering from a disaster”

Okada Elementary School

### I. Disaster Situation and Purpose of Preparing and Applying Teaching Material

#### (1) Disaster Situation

Okada Elementary School is located at a position of 2.5 km from the Pacific Ocean.

During the Great East Japan Earthquake, approximately 40 minutes after the earthquake, ‘Tsunami Warning’ was received and as a result, children and evacuees were evacuated to the 3<sup>rd</sup> floor of the school building. Children who had been evacuated to the school building witnessed the scene of Tsunami flowing into the school yard.

Afterwards, the school became an evacuation camp. Even after the school was reopened for classes, the special classrooms and the gymnasium were never used. The children continued to share the school premises with the evacuees until summer break. Many children who lived along the coast line lost their homes. For this reason, some children were forced to move in and live in temporary housing and, hence, had to attend school from far away.

#### (2) Purpose of Preparing and Applying Teaching Materials

May 2011. 40 grade 6 students were invited to Kobe City at the PTA meeting organized by Kobe PTA Council and Kobe City Elementary School Principal Association. Although the children were very much anticipating to visit ‘Universal Studio, Japan’ and Ijinkan (Western style residences), however, as their supervisors we did not want it to be just another site seeing trip. Kobe is a city that experienced the Great Hanshin-Awaji Earthquake 16 years ago and has undergone reconstruction. As children of Sendai who have experienced a similar disaster we saw it as an opportunity to think positively and learn about reconstruction.

As a result of this, for the 6<sup>th</sup> grade students, during the class session on “About our life”, a new session on “What we can do” was added with the aim of understanding the mechanism of the Great East Japan Earthquake, the subsequent onset of Tsunami and methods of safe evacuation; the study

on preparing for a disaster and disaster prevention goods were conducted and ideas exchange were performed. Besides this, during the class observation day in July, we conducted lessons on the Great Hanshin-Awaji Earthquake and the Great East Japan Earthquake. The purpose of this implementation was to convey the importance of study tours to towns recovered from the earthquake, like the tour to Kobe where the students can listen to the stories of the people.

The contents of exchange with the City of Kobe and implementation of the class observation day held in July have been listed below.

### II. Classroom practice and actual exchange at Kobe

#### (1) Comprehensive School Hours - “What one can do to recover from a disaster”

##### ① Goal

Recover from the earthquake and think about what we can do for the future.

##### ② Teaching plan

Lesson flow	Teaching Contents
Introduction	Comprehensive school hours - “What we can do to Recovering from a disaster” - a look back on what you have learnt.
Progress	<ol style="list-style-type: none"> <li>Support for the Great East Japan Earthquake <ul style="list-style-type: none"> <li>In the Great East Japan Earthquake, a great deal of support came from the people of the Eastern Japan. There was a great deal of support from the outside.</li> </ul> </li> <li>Recovery from the Great Hanshin-Awaji Earthquake <ul style="list-style-type: none"> <li>Make students notice that it was not the first time when Japan experienced such a large scale earthquake and display the pictures demonstrating the damage scenes from the Great Hanshin-Awaji Earthquake.</li> <li>By looking at the pictures published in newspapers at the time of the Great Hanshin-Awaji Earthquake (people queuing up at the water supply station and people preparing meals), encourage the students to think about people at that time.</li> <li>Compare the current photographs of Kobe with those taken 16 years back, and think together about what we can do for the reconstruction of Sendai.</li> </ul> </li> </ol>

Summary	Convey the thinking of teachers that it is the "People's power" that supports recovery, and let children have that impression.
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What we want to convey to the students through this class is to be hopeful about the future. With the fact that Kobe has been restored during the Great Hanshin-Awaji Earthquake, we would like the students to believe that "We can do it too". The children held their breath and watched the snaps of collapsed highways and buildings, which were selected from the photo album of the Great Hanshin-Awaji Earthquake. After that, when the students were shown the recent photographs of the same places, then the students expressed their excitement saying 'Amazing', 'Now it is more beautiful than before'. "The Kobe City you will go now looks like this. We should learn a lot of things together."

After the lessons, the impressions of the students are as noted below:

- I was thinking about the Great Hanshin-Awaji Earthquake in the class. Even though buildings and highways were collapsed during the earthquake, 16 years from that time all those collapsed buildings have been made back to their original state. I wish for a fast recovery after this disaster too. I also want to repair my own home.
- It was a very interesting lesson. I think I would like to see with my own eyes what Kobe looks like now during our trip from 1<sup>st</sup> to 4<sup>th</sup> of August. And, I think I want the North East also to be reborn similar to Kobe.
- Seeing the Kobe City reborn, I feel being inspired to do our best. And I would like to say thank you to everyone who is willing to support us.

#### (2) Practical implementation of visiting Kobe for exchange

Children had the three following goals during their visit to Kobe for exchange.

- To feel the kindness of people of Kobe City
- To learn the strengths of Kobe City
- To express your sincere gratitude

The students were encouraged in advance to keep in mind the three goals especially in the scene of actual exchange. Here, the main contents of exchange experienced from August 1<sup>st</sup> to August 4<sup>th</sup> during the Kobe visit have been presented.

#### (1) Kobe City Daichi Elementary school

Kobe City Daichi Elementary school is situated in Suma ward of Kobe district. This was devastated in the Great Hanshin-Awaji Earthquake. During the exchange meeting, the exchange was enhanced through playing games, singing in songs and doing other activities with all 920 students of the Daichi Elementary School.

#### (2) Itayado shopping district

This shopping district is also situated in Suma ward. During the disaster, this shopping district burned down, and many people perished in fire. Now the shopping district is reconstructed and statue of "Iron Man 28" is built there. The children were guided by the students of 6<sup>th</sup> Grade of Daichi Elementary school during their visit to the shopping district. The shop owners of visited shops cheered us with warm words.



#### (3) Kobe City Sumiyoshi Elementary School

The Kobe City Sumiyoshi Elementary School remarkably performs in the NHK Chorus Contest. This school has initiated singing the song 'Shiawase hakoberu yō ni' which was composed with the hope of reconstruction of Kobe. During the exchange meeting the song was performed along with the children to make their friendship bonds stronger.

#### (4) Kobe City PTA Council

This time, during the meeting organized with the eager support of members of the Kobe City PTA council the children had a chance to see the pictures of the Great Hanshin-Awaji Earthquake and to learn about the people's experiences during the disaster as well as the situation before the reconstruction.

Below is a note on the impressions expressed by the children.



- When we were feeling tensed while visiting Daichi Elementary School, all students were trying to tell us interesting things, make us laugh and talked to us in a friendly manner. It was really cheerful to hear people at Itayado shopping district say 'Thank you for coming'.
- I had barbecue with the people from a local PTA. After wards, they were telling us about the disaster and showed us the photographs. When I looked at the photos, I remembered the Sendai earthquake and I felt extremely sad. The members of the PTA were very kind when they talked to us. Kobe has recovered from the sadness - I think I also should not be sad for ever and I need to learn from what I see.
- I have learned two things from this Kobe trip. First is the strength of everyone which was put in for the reconstruction of Kobe. I began to think that I also want to reconstruct Japan soon. I want to make Okada a great town. I want to return to Okada with clean air and lots of nature. My hope begun to grow in this way. The second point is about the kindness of people. Like everyone in Kobe, I want to be kind toward people around me. I began to think more than ever before that I want to call out and help my friends or people who are in need of help. I am so much thankful to all people of Kobe, who have taught me an important thing, that I have no enough words to express my gratitude. Someday and in some form, I would like to pay back to all the people of Kobe.



### III. Summary and future steps

We think that the exchange we had with Kobe City that experienced a big earthquake, was highly significant for us.

The 6<sup>th</sup> grader students of the year 2012 also experienced the exchange invitation visit and this can be thought of as a "Familiar project that I can do" during the comprehensive school hours. According to plans from the children, it was observed that the visit to the disaster prevention facility during the Kobe trip has inspired the children. Although the exchange visits are over, we want to continue educating children who start realizing "the reconstruction that we can do by ourselves" through the learning experiences from the City of Kobe which became a pioneering area of reconstruction.

#### (3) Subsequent exchange with Kobe City

During the next year February, with the cooperation of NTT East and NTT West, we had a web conference with the Kobe Daichi Elementary School. We were able to tell about the Okada Elementary School situation after one year has passed since the earthquake in real time. Besides this, the children were surprised to see the video and know about the actual fund-raising at the Sumiyoshi shopping district by the children from the Daichi Elementary School. The fact that there are some people far away who are willing to support us, remains deep in our hearts.

## “Making a Community Disaster Readiness Map” Fourth grade General Studies hours

Shoryonishi Elementary School

### I. Purpose of the Lesson

Two elementary schools located in the same housing development (this school and the Shoryo Elementary School) worked together to create a disaster prevention map for the community. As part of the General Studies hours, students were asked the question, “What will you do if an earthquake happens when you are outside the school?” The students were divided into groups and were asked to investigate the hazardous locations, buildings, evacuation sites, and other items in the area, and enter them into a map. The objective was for each student to improve his or her awareness of disaster readiness, and to think about the disaster readiness of the area as a member of the local community.

### II. Lesson Plan

1. Unit Name “Making a Community Disaster Readiness Map”.

2. Unit Objective

Improve students’ awareness of disaster readiness, and enable them to think about local disaster readiness as members of the local community, through preparation of a Community Disaster Readiness Map.

3. About the Unit

The fourth grade Social Studies curriculum includes a unit titled “Safe Living”, in which students learn about the work of the police and fire department. “Making a Community Disaster Readiness Map” was created as an expansion of this unit’s contents and is positioned as part of the General Studies hours. We created a plan for joint creation of the Community Disaster Readiness Map together with the children of Shoryo Elementary School, a school which will be combined with our school during the 2013 academic year. Because this elementary school is located in the same housing development and the same junior high school zone, we planned for each school to create of its district and then combine the maps to create a complete map. Ahead of the upcoming integration of the two schools, we believe that this unit was also important as a learning exchange between the students.

It was also decided to hold a joint presentation event of the students together after the map was completed. We also utilized the school support regional headquarters so that local residents could accompany the student groups during the ‘examine and learn’ program in order to give students information about disaster readiness warehouses and other facilities.

## 4. Teaching Plan (All 17 hours handlings)

Hour	Main learning activities	Important points
2 Awareness	<ul style="list-style-type: none"> <li>○ Students look at pictures and identify potential dangers in them.</li> <li>○ When commuting to and from the school, students look for hazardous places on their routes to school, and record them in their personal maps.</li> </ul>	<ul style="list-style-type: none"> <li>○ Work to create a common understanding of the hazardous places throughout the school year.</li> <li>○ Students are instructed to record their observations while commuting to and from the school during a period of 4 days.</li> </ul>
	<ul style="list-style-type: none"> <li><input type="checkbox"/> Students think about the hazardous places in Shoryo town and what they should do if a disaster such as an earthquake happens when they are in these places.</li> <li><input type="checkbox"/> Students investigate to find out what steps are being taken in Shoryo town in preparation for a disaster.</li> <li><input type="checkbox"/> Students create the disaster readiness map of the Shoryo District in cooperation with Shoryo Elementary School.</li> </ul>	
4 Planning	<ul style="list-style-type: none"> <li>○ Students plan for creating the disaster readiness map. <ul style="list-style-type: none"> <li>· In groups, the students confirm the hazardous places in the area.</li> <li>· What measures are being taken at facilities in the Shoryo District?</li> <li>· What measures being taken in the students' own neighborhoods?</li> <li>· What kinds of evacuation sites are there in the region?</li> </ul> </li> <li>○ Students organize the subjects which they want to investigate and the persons who they want to interview.</li> <li>○ Students assign the work to the members of their groups.</li> </ul>	<ul style="list-style-type: none"> <li>○ Investigations of the facilities in the district will be divided between the two schools.</li> <li>○ Utilize the school support regional headquarters and submit requests so that members of crime-prevention volunteer patrols and others can lead and watch over each group of children</li> <li>○ Groups will be created for each district, coordinating the number of members in each.</li> <li>○ In advance, check the Designated Evacuation Sites, temporary evacuation sites, and housing shelters, and confirm how they will be indicated in the maps.</li> </ul>
4 Investigating	<ul style="list-style-type: none"> <li>○ Investigation 1 <ul style="list-style-type: none"> <li>· Each group investigates the hazardous locations in the district, accompanied by local residents. Students also conduct interviews regarding disaster readiness measures in the town while being shown disaster readiness warehouses and other facilities.</li> </ul> </li> <li>○ Investigation 2 <ul style="list-style-type: none"> <li>· Each group visits the facilities in that area to examine the measures taken in preparation for earthquakes and other disasters. (Examples: kindergarten, community center, bank, post office, supermarket)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>○ Investigation 1 <ul style="list-style-type: none"> <li>· Provide each group with a digital camera and a map which the students can fill in.</li> <li>· Ensure that students act politely and understand that special measures have been taken to accommodate their investigations.</li> </ul> </li> <li>○ Investigation 2 <ul style="list-style-type: none"> <li>· Requests must be submitted to the facilities in advance.</li> <li>· Shoryo Elementary School students will investigate the civic center and fire department.</li> </ul> </li> </ul>
5 Organizing the results	<ul style="list-style-type: none"> <li>· Each group enters and organizes the examination results in the map of the investigated sites.</li> <li>· The maps which were prepared jointly with Shoryo Elementary School are joined together, producing a complete disaster readiness map for the entire Shoryo District.</li> </ul>	<ul style="list-style-type: none"> <li>· Coordinate with Shoryo Elementary School in advance so that symbols, use of photos, and other matters will be consistent when they are entered in the map.</li> </ul>
2 Presentation	<ul style="list-style-type: none"> <li>· Conduct a joint presentation event for the two schools. Each school presents the results of its investigation and their ideas related to disaster readiness in the Shoryo District in ways that are easy for everyone to understand.</li> </ul>	<ul style="list-style-type: none"> <li>· Inform the students that the disaster prevention map will be taken over by the new school in the future. Organize the information which needs to be conveyed to next year's fourth grade students.</li> </ul>





Showing students the inside of a disaster readiness warehouse



Interview regarding disaster readiness measures at the Post Office.

### III. Summary

#### 1. Results

- By examining the hazards in the area, the children were able to think about the specific actions they should take when a disaster occurs.
- The children learned about the steps taken for disaster readiness at various facilities in the Shoryo District.
- The children learned about the various measures taken by local residents in preparation for a disaster. In addition, the children were given information by members of the local community, developing feelings of gratitude to the community and love for the region.
- The children learned that there are various types of evacuation sites, and in particular that the schools, which are Designated Evacuation Sites, have stockpiles of supplies and disaster response equipment.
- The students learned to think on their own as to what they can do to prepare for disasters. One such act is the creation of a disaster readiness map. Students also became aware of their status as members of the local community.
- Since the two schools located in the same Shoryo district cooperated to create the disaster readiness map, they were able to create a more complete and informative map.

- Because the students together prepared the disaster readiness map of the Shoryo Elementary School district and the Shoryonishi Elementary School district, they were able to deepen relationships with friends at the new combined school that will be established next year.

#### 2. Issues

- It was difficult to arrange times for meetings of both schools for planning the cooperation between them.
- Efforts for disaster readiness in the area are still in a transitional period. It will be necessary for fourth grade students to work to improve the accuracy of the map each year as part of their General Studies hours.
- For future activities such as disaster readiness drills which are carried out in collaboration between the school and the community, it will be important to continuously conduct disaster readiness learning activities based on the disaster readiness of the school as a whole.

‘Kozo Kotoshi Tsuranuku Boh No Gotoki Mono.’ (It means ‘Something like a bar that penetrates from last year to this year’)~Consider Recovery of education in view of school management~

Higashirokubancho Elementary School

## I. Introduction

After the Great East Japan Earthquake, the word “Recovery” has added a new meaning which We, the Japanese, resolve to face the various problems occurred from the earthquake disaster, until they would be solved.

Recovery is a big proposition in all fields/areas of politics/economy/culture/education.

We need to keep a record of the education which needs to be developed and which can only be handled by the faculty of the school, who are the witness of history and the bearer of recovery.

This is to grow students into adults who would take responsibility of recovery in the near future and to make efforts to resist the fading memory with the passage of time.. We should have the strong will, which would penetrate in few decades to hold on and face the problems imposed by the disaster, regardless of the extent of the disaster.

## II. Approach/Improvement in curriculum

One of the things that we thought after operating evacuation shelters was “From now on, how to progress the education activity”. I was attacked by some monologues (asking oneself) which ended up in a sense of duty. “How should I receive the unprecedented big earthquake disaster? What should I teach my students in the present situation called as national crisis? As an experienced person of earthquake disaster, I need to send message to many people.”

As result of asking myself, I hoped that they would survive strong in this future society. I felt mixed emotion of support and expectation for children who would be responsible for recovery. Only because the children had survived the fear, anxiety and harsh life, we want and we hope that the children will bear the sturdiness.

In school education, we can put into practice by idea and improvement in curriculum. From 2013, on the subject of the Great East Japan Earthquake, our school has worked on study which is called as

“Learning from earthquake disaster”. There were discussions on the meaning and value of study, we are trying to realize their study into Working Unit Learning. A few examples are introduced as below:

### 1. Approach in Comprehensive learning time (indoor research)

We are especially focusing on comprehensive learning time. The staff was instructed to develop Working Unit in 30 hours, “Learning from earthquake disaster”.

After the earthquake, Japanese showed to world, their thoughtfulness, judgment and high spiritual culture which give more priority to others than self. Also, in our refugee shelter and Higashiroku district, we could see the heartwarming approach and behaviors everywhere. We reproduce them and develop our learning. By learning the greatness which was actually done, we can develop a learning that will provide a feeling of attachment towards the local community and the region.

This is an example of the achievement which was observed in the class practice. The children will be involved with the local people in the community and will feel a sense of attachment to the city. The people, who are involved, will get a way of life of self-satisfaction through the involvement of others. The mutual involvement of people will foster the feeling of liking the people, liking the town. Education is human creation. At the same time, this is also the work where a person learns from another person. Education as a model of the objective of longing is said to be the history that one creates oneself. In daily life, on the education that creates a feeling of longing, can help create schools that move along with the local community. We, Japanese, had paid a big sacrifice and, in return, obtained perfect opportunity to promote this. “The People nurture the city and the city will in turn bring up the people”, has come from “Learn from earthquake disasters”.

## 2. Securing the number of hours

As one of the measures to resolve non-credited classes and to ensure standard hours without any replacement, we set 7 hours per day classes. This is the measure for no classes from March 12 to March 24 (Closing Ceremony), delay in opening ceremony (1 day) and, due to morning class, decrease in school hours during April beginning. This was made possible because of the notification from the Ministry of Education about the flexible operation of one unit in time in disaster area. The time required for meal preparation and clearing the table was adjusted and has formed a schedule of 40 minutes as a unit time. This is an initiative of simple lunch period.

Academic achievement guarantee cannot be realized by eliminating class study hours. In case of emergency, we worked more to ensure opportunities to learn.

## 3. School events to convey hard work of children

We reviewed traditional athletic meet and school art festival, and changed them into Athletic meet specializing in running and into Music Recital specializing in songs.

"Smile of children is symbol of hope, Dynamism of children is first step of recovery." This is catch phrase in news from Principal's office in fiscal 2011. After earthquake disaster, various people have implemented support activities to encourage disaster victims and disaster area in various place/scene. Some child said, "I want to get well in~." The figure of dynamic children resembles the hope from works of artist and performance of athlete. The figure of a brave child is impressive. For that, trace of instruction of staff and figure of children working hard must be seen in school events also.

The singing voice to the 'Baton Pass', we trust relationship, even without looking back and listening to voice of our friends. The local people and the parents had raised their voice in excitement. The dynamism of children has the power to bind strongly parents and the local schools. The understanding and support for the school will be born from the success of the child. Taking advantage of the great earthquake disaster, we are committed to create school events where we are able to see leadership.

## 4. Earthquake lunch day

We made March 11, 2013 (Last year March 12, 2012) as 'Onigiri' (Rice balls) Only Lunch Day. There are three main reasons for this. First reason is to know norm and patience of refugees, and to snuggle up to their feelings. Another reason is to learn the importance of patience by recalling experience of withstanding hunger.

On the night of March 11, 2011, around 1800 refugee suffered from cold and anxiety together in gymnasium and 1st and 2nd floor of school to open to them. The alpha rice 650 meals were stocked.

We made 125 servings of 'Onigiri' (rice balls). The number was judged to bridge until arrival of relief supplies. For nearly 600 tangerine sized rice balls, children, mothers with infants and elderly were given priority for allowance. There was not even a word of complaint from refugees.

Just after the earthquake, children also felt hungry due to food shortage. Simple lunch like break and milk continued at school also. During this period, there was no leftover of even an ounce of bread or a drop of milk. In all Japan, we shared experience that we cannot be selfish. We came across the value which we should never forget in days of plenty.

This year also, we want to speak to children and make them acknowledge the value of that day in their hearts.

## 5. From "Hometown Recovery Project" to

"Omiyacho Big strategy with a lot of flowers"

All cities are managing "Hometown Recovery Project" together. In our school, is seemingly expanding with participation of neighborhood association officers. Feeling to local school support activities. But 'Greetings' is still in range of 'activity'. Relationship between local people and children requires further approach and enhancements. As one of the improvements, from 2012 we did movement to decorate flowers that children had grown up, in local shopping area and fill Miyamachi in school district with a lot of flowers. They have some feelings on flowers that they took care. We expect that, through growth of flowers, greetings and conversation can be wide-spread. We are thinking that, the deep connection clarified in advanced practices of Life Sciences, would appear as a result of efforts of the



whole school.

After earthquake, a flexible and tough Town planning is required. The flexibility is deeply related to maturity of community. Through educational activities developing in region, we think to continue approach from school to promote formation of community.

### III. Others

In region, there are strong support teams to encourage concretization of Principal's management philosophy. School Councilor, School officials' evaluation committee, School support regional headquarters, PTA and local people have become major force to support school. Principal needs to have strategies to gather together each powers, by acting at times as a top sales man and at times as a coordinator. In particular, it is important to verify the fact and phenomenon and give them some meanings, and send message to region. We take it importance on approach to convey good points of region. In future also, mainly from letter from Principal's office, which continues 'Earthquake Series', we want to elaborate to send messages in various manuscripts and various meetings etc.

### IV Conclusion

The Great East Japan Earthquake had cast a variety of problems not only in Japan, but around the world. In globalized society, events in one country and in one region would run through world quickly and would become country's own issue and own self problem. 3.11 is the typical case. Educational community is also in globalization. Response to problems cast by 3.11, overlaps with the awareness and approach of faculty staff who face school challenge in knowledge based society.

What school is required is that education to capturing eternal value and era would become educational activities taking its root in local area. Learn to share the value in region with local people would blow life into curriculum and establish the axis for living mutually.

## Efforts aimed to restoring and developing learning and living environment for reopening of the school after the earthquake

Kabanomachi Elementary School

### I. Damage suffered by school due to disaster

1. State of children during the earthquake disaster  
(1) The Tohoku Region Pacific Ocean Earthquake (The Great East Japan Earthquake) that occurred on March 11, 2011 at 2.46 PM caused severe damage over an area in Eastern Japan.

At the school, lower grade children of each class had finished their 5<sup>th</sup> class, and we were about to receive instructions for returning home. The upper grade children, who were preparing for their upcoming graduation ceremony, were in the middle of practicing the graduation certificate receiving ceremony at the gymnasium. The ground started to shake in a waving manner the book case, the cleaning tools locker, and the shoe box stand near the entrance fell down one after the other like a domino, although they were fixed to the wall by the wall brackets. The children went under their desks as specified by the manual of the emergency drill at the moment they experienced the first strong shake and stayed underneath their desks protecting themselves until the shaking seized

(2) The school building had tilted, the ground had subsided, the connecting part between the new and the old buildings was vertically dislocated and the terrace part of the place around the school was

deformed in a wavy manner. Since that day the school main building became an evacuee shelter for one month and the school gym -for four months until July. After the evacuee shelter was closed down, serious investigations revealed a risk of collapse of the school building, and the entry to the school was prohibited.

(3) After the major earthquake subsided, children were handed over to their parents and preparation was done for the opening the evacuee shelter. A roll call for safety check was carried out at the school yard to ensure the safety of children in each grade, children hand over and the hand over time were recorded according to the manual and the drills as expected. The last child was handed over after 21.00 on that day.

### 2. Establishment of evacuation shelters

(1) Under these circumstances, where it is difficult to establish contact with the outside world, under the leadership of the school principal, the evacuation headquarters was established, and preparations were done for converting the school into the evacuation shelter. Confirmation of the number of citizens who were taken to evacuation shelter, by-district distribution of evacuee shelters, prospects and food security, information on the tsunami etc. was undertaken in consultation with the persons in charge from the local neighborhood association. On that day,



1700 evacuees were accepted to the shelter. The teachers, while continuously staying at the school for several days in a row were helped out with preparing meals, making the list of evacuees, accepting the supplies for evacuees, and cleaning the school for exploring the prospects of reopening. The evacuee shelter administration, which was mainly composed of the local neighborhood associations, had started three days after the earthquake.

### 3. Reopening of school

(1) We were able to celebrate the admission ceremony on 19<sup>th</sup> April. The ceremony was conducted by using the half size of the gymnasium of elementary school that was being used as an evacuee center. After that, the school was reopened by combining the gymnasium, martial arts field and the multipurpose hall of the junior high school situated about 700m away. As for the classrooms, 180 students of first and sixth grade were assigned to use a partitioned multipurpose hall, while 280 students of second, third and fourth grade used the gymnasium portioned into 8 areas with cardboard and other materials. For 90 students of fifth grade, the martial arts hall was partitioned into 4 areas with cardboard etc., and each area was used as a classroom. They faced numerous issues such as lack of sufficient teaching materials, noise problem, health and hygiene problems arising out of sharing just one toilet and water source, commuting of students, schedule conflicts with junior high school students, and the lack of physical activities because the use of playground for all was problematic.

(2) The temporary stay at the junior high school continued from April to November until a fabricated

temporary school construction was completed.

During the summer, the temperature rose to 40 Degree Celsius and it called for urgent improvements of health and hygiene management of children. Also, since all people were put in the gymnasium, the generated noise and stress of the children were also major concerns.

## II. Actual development and restoration of learning and living environment

### 1. Efforts for improving the learning environment

(1) Measures for noise reduction: Because we could always hear noise from the next classroom, a rule for allowable noise levels was established for discussions and activities like music. Singing and playing musical instruments was no longer allowed in the gymnasium, and the musical instrument performance was taught outdoors. In addition to this, we requested to allow using the music room of the junior high school when it was not occupied, and joint music classes for students of different grades were conducted.

(2) Handling the lack of physical activities: Since there was no time to play freely in the school yard even during the school hours or on holidays, the curriculum was modified so that the physical education class was extended for two periods by including walking up to the elementary school and using the school yard, the gymnasium, and the pool. Also, the 'Kabanoko relay tournament' was started as a school event and it was held in the Sendai City Gymnasium. Classes with a focus on hands-on activities and field trips were also actively planned.

(3) Enhancement of book corner: The stage of the gymnasium was converted into a temporary library to create the environment where children can be close to books in conjunction with the collaborative key objectives.

(4) Improvement of classes suitable for the environment: We planned for enabling the creation of lessons which will be meaningful and easily understood by any child, by promoting "Universal design of class" and by implementing ideas on learning tools. In addition to this, class form was done by combining grades and sharing the place of learning and teaching materials and teaching tools. Promoting external guest lecturers with emphasis on food and agriculture hands on workshops etc. are





devised to suit the current environment.

## 2. Efforts for improving the learning environment

(1) Handling of children's stress: Because of the large earthquake, many children have sustained deep impact in their hearts. With the school counselor and PTSD in the center, we started a research program called "Kokoro no care", which means "Care for the Heart". This program was conducted for all employees and they learned about the changes that appear over a course of time, types behavior and symptoms have occurred, and what practical measures to be taken amidst the ongoing aftershocks.

(2) Handling extreme heat: Since many children were sitting in the narrow space of the gymnasium and martial arts field, the room temperature was very high. Though spot air conditioners and 2 fans were used and even ice blocks were placed, these measures were not very effective. To prevent dehydration, children were instructed to bring their water bottles.

(3) Hygiene control: Because the availability of tap water was limited, alcohol antiseptic solution was kept ready in each class room and efforts were taken to keep students' hands clean.

## III. Conclusion

After the earthquake, we were going through days when our future was uncertain. We were feeling the great relief when the school was resumed. Various efforts were taken to ensure a safer learning environment for children. We again felt the importance of cooperation between the local community, school, and the parents. In addition to this, the most important aspect is the success and effect of the daily learning drills and development of trust between the teachers and the children.

## Measures to retain children's reading during a period in which children are unable to use the library

Moniwadai Elementary School

### I. Environmental circumstances

Moniwadai Elemental School consists of the north and south wings. The north wing received tremendous damage from the earthquake, and children were prohibited to enter the north wing immediately after the earthquake. The library is on the 2<sup>nd</sup> floor of the north wing. There was no damage such as bookshelves from falling over or books getting wet, but children were not allowed to go to the library.

In 2010, one of the priority objectives of the school was to promote reading activities. Children's desire for reading was increasing through activities such as reading session every morning, posting up the number of books loaned, and introducing recommended books. The average number of books loaned to one child exceeded 32 books per year. We did not want children to stop reading books due to the unavailability of the library, so we have been working together with the school librarian to prevent this from happening and to create an environment in which children can read books.

### II. Actual practice

#### 1. Lending books to the whole class

##### (1) Box lending

To create an environment for the morning reading session which has taken a firm hold in the school, we got a box for each class in 2011, put 40 to 50 books in each box and then lent the box to each class. We distributed the lending list to homeroom teachers and asked them to manage the number of books in the box. Depending on the reading situation, we also requested them to return the box to the library so that we can change books in the box. We have been able to continue with this activity without losing books because made sure that children did not take books home. Children had to choose from a limited number of books, so some of them were choosing books which they would not normally choose, and it broadened the scope of their reading.

##### (2) Lending books which can be used in lessons

We gathered reading materials mentioned in textbooks for each year groups, and delivered them to classes as necessary. This was mainly for the Japanese class. Also we were able to request the school librarian to select books in accordance with lesson topics, such as books on insects or stars for science, books on ancient tools for social studies, and history comic books.

#### 2. Lending books to individuals

##### (1) Using library lending card

Because children were not allowed to take books home with the box lending, they started saying that they want to borrow books to read at home. So we have decided to try lending books using simple lending card. It worked as follows: Children wrote ① the name of the book they want to borrow and ② their name and class on cards, and then submit it to homeroom teachers. Homeroom teacher then gave cards to the school librarian, and the school librarian delivered books to classrooms after school. We began introducing this system to the 3rd and 4th grades, because we saw a high number of books being borrowed by children in these year groups. There were children who wanted to borrow books because they became interested in the system, as well as those who were looking forward to borrow books. However, some of them could not easily choose books because they were not able to actually see books like they used to be able to do. To help these children to choose books, we posted a list of books selected by the school librarian on the wall of classrooms. The system started smoothly for the 3rd and 4th grades because children were able to borrow books on the list or books which were previously borrowed by their friends.

We then allowed the children in the 5th and 6th grades to borrow books. Their time is fully engaged, but those who love reading were looking forward to borrowing books using lending cards.

For the second year, in 2012, we began lending books using library files with barcodes, which we

originally used. We also filed lending cards in library files. Previously, children were not able to borrow a book at all if someone else was borrowing the particular book they wanted to read, because they were only able to write one book on their card, so the school librarian used to recommend a substitute book. However, with lending cards filed in library files, children were able to write several books all at once on their card, so they were able to get hold of books they wanted to read more easily.

We also made lists of books selected by the school librarian for the 1st and 2nd and the 5th and 6th grades, so there were 3 kinds of list. We made new lists every 3 to 4 months. They require a lot of space to be posted on the wall of classrooms, so we decided to file these lists in library files as well.

#### (2) Mobile library service provided by the school librarian

Children in the 1st and 2nd grades did not have the experience of visiting the library as well as borrowing books using library files (barcodes), so we thought it would be difficult to lend books to each children in those year groups. However, there was a rearrangement of classrooms in 2011 and classrooms for the 1st and 2nd grades were on the 2nd floor, which is on the same floor as the library. Although children were not allowed to enter the north wing, this enabled the school librarian to bring a wagon containing 50 to 60 books and a computer from the library to classrooms, and children in the 1st and 2nd grades were able to borrow books. In each classroom, we taught them the rules and method of borrowing books, and we have been bringing the wagon with books once a week. We have been able to push the wagon from the library to classrooms because now they are both on the same floor, and each child in all year groups are able to borrow books.

### 3. Opening a mobile library

#### (1) Transferring materials required for research learning

There was no empty classroom available, but we managed to move 5 computers, encyclopedias, pictorial books, and dictionaries from the library to the multipurpose room, so that children can do research using these resources. We also transferred dictionaries to classrooms of year groups learning

how to use them during Japanese class.

#### (2) Book festival held at the arts and craft room

The book festival held in the library every December was decided to be held at the arts and craft room, only special room which could be used. The school librarian and children in the library committee carried more than 10 cardboard boxes filled with books from the library, and lent these books during the festival. There was a great turnout at the festival, because children were able to actually take books in their hands and look at them for the first time in awhile. Most books were immediately lent out, but the school librarian kept bringing books to the arts and craft rooms, so there were no children who could not borrow books.

Apart from the book festival, we also held a similar event in July so that children could take books home during summer holidays, and this also attracted many children.

#### (3) Lending books on the corridor in front of the nurse room

The nurse room is opposite the classroom for the 6th grade. In January 2013, we put newly published books along the corridor in front of the nurse room and let children borrow books by filling in the book loan record, because we wanted children in the 6th grade just before the graduation to make last memory. There were concerns about losing and damaging of books because they were placed on the corridor, but all books were handled with care, and even though a large number of books were being borrowed, they were all returned to the library in March in good conditions.

### 4. Reading activities by children in the library committee

#### (1) Reading books aloud

The library committee still exists even though they cannot carry out any activities in the library, and they continue their activities by thinking of doing things they can do outside of the library. One of them is reading books aloud to other children. They went around each class during the morning reading session to read books and give quiz about books.

#### (2) Appeal by posters

They created posters encouraging children to read even though they could not go to the library, as well as telling them recommended books. They could not

use the broadcasting system within the school, so they voluntarily came up with ideas on what they can do and appealed to all the students of the school.

### **III. Conclusion**

Immediately after the earthquake, I thought it was a serious matter that children were not able to use the library. However I believe we have managed to maintain an environment in which children can read books by starting with what we can do, with support of the school librarian and teachers. I felt once again, that the best way to retain children's reading is to carry out any even small attempt to maintain an environment in which children can always take books. I believe the greatest achievement over the past 2 years is smiles on faces of children who were looking forward to borrow books, when they happily take books home.



## Unit name “Saving livelihood” Teaching material “Preparing for earthquakes: Thoughts of people in the fire department”

Sendai City Elementary School Education Study Group Audiovisual Section Teaching Materials Production Committee

### I. Purpose of teaching materials production

Sendai City Elementary School Education Study Group Audiovisual Section Teaching Materials Production Committee is commissioned from Sendai City Board of Education to produce video teaching materials rooted in the local community. Last year we have decided not to produce teaching materials about the Great East Japan Earthquake, because we thought it was still early to do so taking into consideration of feelings of children and people in the region.



However, memories of the earthquake begin to gradually fade as the time goes by. There were opinions among some of the members in the Teaching Materials Production Committee that we should actively make an effort to produce teaching materials related to the earthquake, because they felt that they may not be able to pick up what people really think if they miss this period in order to make teaching materials.

There was a unit called “Saving livelihood” in social studies and we decided to produce this material, a video which gets across the thoughts of people in the fire department who were on the cutting edge of helping people. This is because we thought children could learn from the video about the preciousness of human life and how wonderful those people who protect human life are, rather than tragedy.

### II. Actual classroom practice

#### 1. Process of making teaching material

First, we began our research for the teaching material by visiting Arahama Elementary School and

Nakano Elementary School, which were both hit by the earthquake, to find out what is the damage of Tsunami like. All the houses along Teizan Moat near Arahama Elementary School were gone and only a few of the pine trees were left at the place where it used to be a beautiful pine forest. The 1st floor of the school building was badly damaged and there was a watermark which shows that the water has reached to the 2nd floor. The gymnasium was hugely damaged and it showed how strong the Tsunami was.

Gamou Tideland near Nakano Elementary School was completely different and Mount Hiyori vanished because of the Tsunami. The building has 2 floors and it was flooded up to the 2nd floor. There were some big cracks in the concrete walls. Both Tsunamis from the sea and Nanakita River exerted considerable force on the school building.

Next, we gathered information from the fire department. News reports up to now only showed a part of the fire department, but through collecting information we managed to find out the state of the inside of the fire department and the movement of fire helicopters immediately after the earthquake. Furthermore, we also found out that there was cooperation between the city and the prefecture, and the existence of the emergency fire response team from other prefectures such as Tokyo Fire Department.

We started making storyboard for the video teaching material while referring to information we have collected and records of fire fighting operations. We made narration and the original draft of the interview which can be easily understood by children, and then we asked the fire department to check the contents of the interviews and made changes as necessary. Based on the storyboard, we interviewed the fire department and the fire brigade in Arahama (current Sendai Airport). We added photos we borrowed from the fire department and narration to the video we have filmed. Then we edited and made it into a 12-minute Blu-ray disc teaching material.

## 2. Structure of the teaching material (excerpt from the storyboard)

Order	◎Narration ○Interview
1	◎A large earthquake of a magnitude 9.0 occurred at 2:46pm on 11th March 2011, with the epicenter approximately 140km off the coast of Miyagi Prefecture. Kurihara registered a magnitude of 7, Miyagino ward registered a magnitude of upper 6, a wide range of area from Tohoku to Kanto registered a magnitude of lower 6 on the Richter scale, and people felt the ground shaking at most of the places.
5	◎Miyagi Prefecture and Sendai City establish the emergency response headquarters and collect information when a big disaster occurs. The fire department was the first to start rescuing.
7	◎ What did you think will happen based on the scale of shaking during the Great East Japan Earthquake? ○The shaking which I have never experienced before continued for a long time, so I was worried that the building of the fire department might collapse.
10	◎ In what kind of system did the fire department tackled the disaster? ○An emergency defense headquarter is established in the event of a big earthquake, all firefighters including those off duty must gather at the fire station in order to respond to disasters. Many firefighters immediately gathered in the event of the earthquake, and we called people to evacuate, and carried out rescue and first aid. Also, a helicopter left from the branch station at Arahama to check the situation of damage of the Sendai City and called everyone to evacuate from the Tsunami.
13	◎ We also interviewed the helicopter rescue party, which was active in rescue operations. How was the Arahama area you saw it from the air when you were warning people about the Tsunami? ○I was flying in poor visibility because it was snowing. When I was calling people to evacuate, I saw a big backwash at Fukanuma beach from the helicopter, so I knew there was definitely going to be a Tsunami, but I could not predict how big it was going to be. When I confirmed that a Tsunami was its on way from above Nanakita River, the Tsunami engulfed the sandy beach, the forest by the beach and Teizan Moat in a second. I thought, "is Arahama area OK?" and when I got above Arahama, I saw the whole town was washed away by the Tsunami. I saw those who evacuated to the roof of Arahama Elementary School. But after confirming their safety, I prioritized to rescue people who were clinging to pieces of floating debris because their situations were more urgent. After that, there was not much fuel left in the helicopter, but the branch station at Arahama was washed away by the Tsunami so we landed at the airfield of Japan Self-Defense Force Kasuminome Base.
14	◎ Would you tell me about the rescue operation at Arahama Elementary School? ○Around 4am on 12th March, I got onto a helicopter of the Japan Self-Defense Force and we went to Arahama Elementary School. There were about 400 people evacuated to the school, but we rescued small children and handicapped people first by lifting them up. Then I remained at the school and cheer up the rest of evacuees.

15	◎ How did you carry out the rescue operation from the following day of the earthquake? ○When down broke, I finally realized how enormous the damage of the Tsunami was. To be honest, I did not know how to rescue people because the damage was something which we have never experienced before. I just desperately rescued people because with the feeling of wanting to save as many as possible of human lives.
17	◎ Finally, we interviewed Mr. Yamada, the Sendai City Earthquake Disaster Prevention Advise, about what we can do to prepare for an earthquake and Tsunami. ○There are many things to be done in preparation for an earthquake and Tsunami, but what I would like everyone to do first is "discuss among the family members about the actions to be taken in disaster situations". Check the location of evacuation area and evacuation route in case of emergency, and decide meeting place in case of becoming separated from the family, and method of getting in touch with each other.
18	◎ The word "kizuna" (bond) was often used after the Great East Japan Earthquake. What do you think about "kizuna"? ○We received a lot of support from all over the support from all over the world after the earthquake, and there are many people who have helped us in difficult time. We cannot even say how much this has cheered us up. I am sure all of you have felt the same way, and not only us firefighters. As long as we live in Japan, you have to live with disasters such as earthquake, Tsunami and heavy rain. But we can help each other to overcome disaster, and I believe this is what the word "kizuna" means.

## 2. Activities during the lesson period

## (1) Aim

To understand the efforts of those who were involved in rescue operation and the activities of the fire department at the time of the Great East Japan Earthquake.

## (2) Guidance procedure

Learning activity of children	Main guidance / support / estimation
1. Grasp the learning subject.	Present the learning subject.
Let's think about cooperation between related organizations and the efforts of those who work there.	
2. Watch the video "Preparing for earthquakes: Thoughts of people in the fire department".	Write down what they thought on the viewing card.
3. Discuss what they have learned from the video.	
<ul style="list-style-type: none"> <li>• The fire department establishes the emergency response headquarters and collects information.</li> <li>• They are in touch with Sendai City and Miyagi Prefecture.</li> <li>• Fire brigades from all over Japan came to rescue us.</li> <li>• Give the first priority to those in danger of their life and rescued them fast.</li> </ul>	<ul style="list-style-type: none"> <li>• Make children to discuss what they learned based on the viewing card.</li> <li>• Show the video again and make them to check this when it is mentioned.</li> </ul>
4. Think about the efforts and thoughts of firefighters.	
<ul style="list-style-type: none"> <li>• Maximized their efforts to save human life.</li> <li>• They are always prepared so that they can rescue people anytime no matter what the situation.</li> <li>• Discuss actions to take during evacuation process among the family members.</li> <li>• It is important to help each other.</li> </ul>	<ul style="list-style-type: none"> <li>• Make children realize of the efforts and thoughts of firefighters from the content of the interview.</li> <li>• Think about their thoughts based on what children noticed.</li> <li>• Make each one of children to think about the importance of helping each other.</li> </ul>

## III. Conclusion

Children were able to think about the efforts and thoughts of people in the fire department by conveying what those people, who were on the cutting edge of rescue operation, really think. Also it made them to think about their roles in the local community.

We are planning dub this teaching material and distribute it elementary schools in Sendai City, with the hope that it will be helpful. The Teaching Materials Production Committee is sustained by volunteering spirit. We will continue to produce teaching materials with themes related to recovering efforts.

## Calligraphy handwriting education facing the earthquake

Director of Sendai City Elementary School Education Study Group Calligraphy Handwriting Research Committee  
Teaching Staff at Sendai City Haranomachi Elementary School

### I. Purpose of practice

Too many people lost their lives in the Great East Japan Earthquake. The extent of the damage varies, but many people are going through hard times which they have never experienced before, apart from those who have experience war. In this kind of situation, our committee has been holding several discussions to see what we approach we can take in calligraphy handwriting education.

This article is about the activities of Miyagi Prefecture Federation of Elementary School Education Study Group and Sendai City Elementary School Education Study Group Calligraphy Handwriting Research Committee, which I am engaged as a secretary (member of the Example Creation Committee) and research director, as well as my own classroom practice.

#### 1. About Kakizome (the first calligraphy of the New Year) exhibition

The Calligraphy Handwriting Research Committee collects about 7,5000 calligraphy pieces of students in Miyagi Prefecture every year together with the calligraphy societies in the junior high schools, and opens "Miyagi Prefecture Sendai City Elementary and Junior High School Students Kakizome Exhibition". The exhibition has been held more than 66 times and more than 20,000 visitors visit the exhibition every year. For that reason, many children practice over and over for the exhibition.

So we thought we will give a twist to the subject word to cheer up children's efforts. Also we were thinking whether or not we could reduce the burden of teachers who were extremely busy with response after the earthquake.

#### 2. Practice focused on Ogatsu ink stones

In calligraphy, the four important tools of brush, ink stone, ink stick, and paper are collectively called "Bunboushihou". Ogatsu in Ishinomaki City accounted for 90 percent of the ink stones made in Japan, but most factories were washed away by the

Tsunami and there were no prospects of production. However, many volunteers collected ink stones from rubbles after the earthquake, and they are trying to recondition ink stones by cleaning them. Also, there is a craftsman who started making ink stones again on his own. We wanted to carry out activities to let children know these current situations and wanted them to appreciate the merits.

Ogatsu Ink Stones Traditional Industry Center which received catastrophic damage



### II. Actual practice

#### 1. Activities of Miyagi Prefecture Federation of Elementary School Education Study Group (1) Giving a twist to the subject word for brush writing

The Example Creation Committee has decided the following words as subject which will cheer up children and visitors to the exhibition.

	3rd grade	4th grade	5th grade	6th grade
2012	Rainbow	Sunlight	Energy	Young power
2013	Song	Sky	Start	My dream





## (2) Improvement of underlay for hard brush

Traditionally, many schools were making effort to create underlay for hard brush after the example briefing session.

So the Example Creation Committee has made improvements so that children will practice willingly by including papers with ruled lines for tracing and underlay with ruled lines to the example of Kakizome.

**About making examples**

Example of hard brush, papers with ruled lines for tracing, and underlay with ruled lines



## (3) Introducing the status of recovery of Ogatsu ink stones

Miyagi Prefecture Federation of Elementary School Education Study Group publishes a journal every year. We written feature story about the current situation of Ogatsu ink stones and activities of recovering them, and distributed the journal to our members in the prefecture.

## 2. Activities of Sendai City Elementary School

Education Study Group Calligraphy Handwriting Research Committee

## (1) Introducing "Ogatsu ink stones" at the summer practical training session



Installed a panel introducing Ogatsu ink stones

## (2) Lecture in Calligraphy Handwriting Research Committee general meeting

"For the recovery of Ogatsu ink stones:  
Propositions to calligraphy handwriting education"



Lecturer: Mr. Yorio Takahashi  
 · Ogatsu Ink Stone Production and Sales Cooperative Association  
 · Representative Director of Takahashi Tanohaha Ink Stone Shop  
 · Chairman of Ogatsu Town Development and Recovery Project

① Situation of Ogatsu immediately after the earthquake and the current situation.

② Role of ink stone and how to use it

③ Demonstration

(3) Special feature was published in the research bulletin "Kohagi"

"Current situation of Ogatsu ink stones"

## 3. Classroom practice (carried out by myself in Haranomachi Elementary School)

## (1) Calligraphy writing class

Enjoy the fun of rubbing down an ink stick to a ink stone



(2) Social studies: Learning “Region with flourishing traditional industry: Ogatsu ink stones ”

Actually take a look at an Ogatsu ink stone and try using it.



(3) Current situation of Ogatsu ink stones

- ① Listen to explanation while looking at photos.
- ② Write letter to Mr. Endo who is a craftsman of ink stones.



Mr. Endo, a craftsman of ink stones reads a letter written by a child

### III. Conclusion

These activities just only begun. I believe we can spread information in regard to Ogatsu ink stones by introducing information on the website, or producing and reproducing materials for children and teachers. Also I think that the learning effect will be further increasing by associating with social studies and social morality when teaching. This shall also help recovery in helping even though it is indirect.

There is a long wait to go until the recovery, but I would like to do what we can as the Calligraphy Handwriting Research Committee.

## Emotional Education through “Think-Act Assembly”

Teacher-in-Chief of Disaster Prevention, Shichigo Junior High School

### Introduction

Our school suffered from the 2011 Great East Japan Earthquake, and is the only school in Sendai City where students and parents alike were victims. Though the severity of suffering varies, students are all injured psychologically. There are many students who still do not talk about the earthquake despite a year and ten months having passed, who force a smile trying not to show any weakness though they live with the agony of having lost family members, and experience the hardship of becoming depressed, having to face daily events. We have put effort into “emotional education and care” this school year, yet we are anxious about the invisible outcome because it involves the education of inner selves.

As part of the education for disaster prevention, “Think-Act Assembly” aims at cultivating a wider perspective and knowledge of disaster response through discussion in groups comprising multiple grades and developing practical skills through imagining actual scenes using simulations. Also, we hope students will acquire the ability to think, discuss and act by themselves on “what we can do during disasters and what the future of Shichigo district is, looking back on the earthquake, etc,” as we have not provided an opportunity for discussion about the earthquake among students before.

The discussion was facilitated by a “Disaster Response Crossroads” simulation game. At first, we tried to create an affable atmosphere using “Disaster Response Karuta (Japanese-style playing cards)” developed at the leader workshops. A feature of the Crossroads game is that it does not provide a “correct” answer, and it emphasizes sharing ideas and expressing opinions from various perspectives.

### 1. Execution Plan for Think-Act Assembly

(1) Date: November 26<sup>th</sup>, 2012 (Mon) 5<sup>th</sup> & 6<sup>th</sup> Periods

(2) Aim: To cultivate a wider perspective and knowledge of disaster response through discussion in groups across grades and develop practical skills through simulation of actual scenes.

(3) Method: A “Disaster Response Crossroads” simulation game

a. What is “Disaster Response Crossroads”?

Crossroads is an educational material for disaster response in the form of a card game, based on interviews with staff from the city of Kobe who experienced and dealt with the Great Hanshin-Awaji Earthquake in 1995. It was developed as a part of “Special Project for Earthquake Disaster Mitigation in Urban Areas” (MEXT) by Associate Professor Katsuya Yamori (Disaster Prevention Research Institute, Kyoto Univ.), Associate Professor Keiko Yoshikawa (Faculty of Business and Commerce, Keio Univ.), and Tsuyoshi Amishiro (Game Designer). (Extract from Disaster Management website of Cabinet Office)

b. Features of “Disaster Response Crossroads”

- Reflecting on disaster response as participants’ own problem, and sharing various opinions and values among participants.
- Learning that there is not necessarily a correct solution in disaster response and past cases may not always be the correct way, and acknowledging the importance of individual response upon thinking in good faith. Also, realizing the importance of thinking before the disaster actually strikes.
- Deepening the understanding of information and preconditions required for making a decision, by using difficult situations in decision-making for disaster response as a material.

- Actively thinking about the disaster response as participants' own problem through a card game, and recognizing the existence of opinions and values different from their own.

c. How to play

i. What you need: 6 Question cards, 7×2 Yes/No cards, Blue Cushion cards (no. of participants ×10), Gold Cushion cards (no. of participants), Self-Evaluation sheets.

ii. Basic Rules:

- Pick the topmost Question card that is face down on the stack, and read out what it says.
- Think what you would do in that situation.
- Pick a Yes/No card, and open it simultaneously at the teacher's signal.
- Distribute Cushion (point) cards according to the ratio of Yes/No.
- Then discuss the dilemma among the group (4-5 minutes).
- Teacher facilitates the sharing of opinions. Students recognize the existence of opinions and values different from their own, and hear a minority opinion.
- Another participant picks the next Question card

iii. Distribution of Cushion Cards

- Participants with a majority opinion get a Blue Cushion card each (e.g. If 4 participants out of 6 had the same opinion, they receive Blue Cushion cards).
- If one participant has an opinion different from everyone else, they get a Golden Cushion card as a special point (e.g. A participant out of 6 had an opinion different from the other 5 participants). Others won't get a point.
- If opinions are divided equally or if everyone has the same opinion, Cushion cards won't be distributed as it is a draw (e.g. 3 vs 3, or 6 participants out of 6 had the same opinion).
- \* Formalize the spirit into a rule of "cherishing the person who pays attention to the issues others fail to notice and acknowledging that something most people overlook might still be important."

d. Instructions for Facilitator = Teacher

i. There is no correct answer in "Crossroads".

- Realize that there are various opinions and a conclusion has to be drawn to proceed.
- Learn the process of drawing out the conclusion many can accept and putting it into effect.

ii. Learn how to respond to disaster through playing the game.

- Teacher facilitates discussion with a clear understanding of what students should learn through disaster response education.
- Teacher explains necessary knowledge for disaster response, such as how to use a fire extinguisher, how to receive alarms and warnings, and how to evacuate safely.

iii. Even if a past case is described as being the correct solution, it does not mean it is correct in every situation.

- Acknowledge that "there are times when past lessons can be applied, yet these past lessons may lead to a harmful result" in disaster response.
- Do not try to seek a single correct answer.

iv. Let students think by drawing their attention to the difference between the game and the reality.

- Show the students that responses can often vary between the answer during the game and when the problem actually happens.
- Different answers can be drawn by asking students "what would you do if you were in that situation?" and "why did you think so?", or telling them the hidden meaning behind the question.



## (4) Implementation

- a. Play Crossroads with groups of 6-7 students from all 3 grades by dividing all classes vertically.
- b. A group consists of 2-3 students from each grade.
- c. Approximately 5 groups gather and play Crossroads in a classroom. Use 15 classrooms.
- d. The third grade students (14/15 years old) act as chairs/mediators of discussions in each group.
- e. Students who attended the leader workshops (held during 2011 and 2012 school years) administer classrooms and share common topics. Contact corresponding students separately and hold a workshop (November 3<sup>rd</sup> week).
- f. Students who attended the first leader workshop in the 2012 school year give a presentation using Disaster Response Karuta they made by themselves. Contact corresponding students separately and hold a workshop (November 3<sup>rd</sup> week).

<<Why “Think-Act”, not just “Act”?>>

- It literally means to “Think and Act.”
- Crossroads originally means “crossway,” “intersection” and “junction.” Here, it means “a point where one has to decide on one’s course of action.”
- The most significant feature of the game is that “there is no correct answer”. It is important to have “risk communication,” which is to “think together” by expressing opinions, or, to put it differently, to think from various perspectives.
- Tell others your opinion with self-confidence, be it the same opinion as others or a minority opinion.
- After sharing thoughts, start acting based on the concept of “self-, mutual, and public help”, which arose from the lessons of the Great Hanshin-Awaji Earthquake

## (5) The outcome and problems of “Think-Act Assembly”

For “emotional education” and “disaster mitigation,” we adopted “Crossroads,” the educational card game for disaster response, and held discussion on topics provided, creating small groups of 6-7 students each by dividing all classes and grades vertically. From the perspective of “emotional education,” we aimed at drawing out students current thoughts a year after the disaster, and making them think it was important to step forward through looking back at the disaster. From the perspective of “disaster mitigation,” we aimed at thinking about disaster response as participants’ own problem, and sharing various opinions and values among participants. Furthermore, students were intended to learn that there is not necessarily a correct solution in disaster response and past cases are not necessarily applicable to different situations; to realize that it is important to think and act individually in good faith about each scene of disaster response though playing “Crossroads”, and to do so, to start thinking before a disaster strikes.

It appeared to be easy for students to tackle the task as it was presented in a game style using cards. Students were able to express their thoughts and opinions despite certain nervousness in a group of different ages, sharing ideas built on the memories and experience of the disaster. As we had intentionally avoided bringing up the disaster as a topic for discussion so far, students were doing their best to tell their experience to others. Many students had avoided speaking about the disaster because they did not want to look back at the time of disaster or when families, local area, or school had not regained stability, but it felt as though the time had come when students wished to talk to others and share their experience as time passes.

It is important for teachers to facilitate discussion with sufficient understanding of what students should learn from the activity. We prepared for the day with study meetings on “Crossroads” aimed at improving teachers’ skills. Students need to have the minimum information and knowledge about conditions to make a difficult decision at the time of disaster from the perspective of disaster mitigation. Facilitators must equip students with basic knowledge while letting them share ideas by drawing out various opinions and values and listening to minority opinions. Such basic knowledge includes “the difference between evacuation advisory and order” and “the amount of drinking water necessary for humans in a day.” Through learning new knowledge, thoughts and opinions advanced and production discussion developed.

A problem emerged as there were cases in which most of the students in a group were from Arahama district, which suffered greatly or in which brothers/sisters gathered in the same group, due to 500 students from the entire school being automatically divided into small groups of 6-7 students. Also, we should have taken the composition of group members and other factors into consideration, though we made arrangements for students who require special care. This time, teachers themselves prepared all the questions, but there could have been deeper discussion if we had included questions based on students' research and ideas. According to questionnaires filled out by teachers, some had difficulty in facilitating sharing of ideas and the burden on teachers was too heavy. Improvements should be sought to further enrich workshops for teachers and share roles among teachers, though teachers worked in pairs this time.

Our school was designated as a "model school for new school-based education for disaster prevention" by the city of Sendai this school year, and we started planning "Think-Act Assembly" this school year. On the day, various issues that require improvement surfaced, such as teacher training including preparation before the day. We realized that we should continue tackling this project as a part of next year's educational program, as we believe that we can cultivate necessary skills in students through continuous effort.



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