

Creating New Relationship between School and Local Community from the Lesson of East Japan Earthquake 3.11



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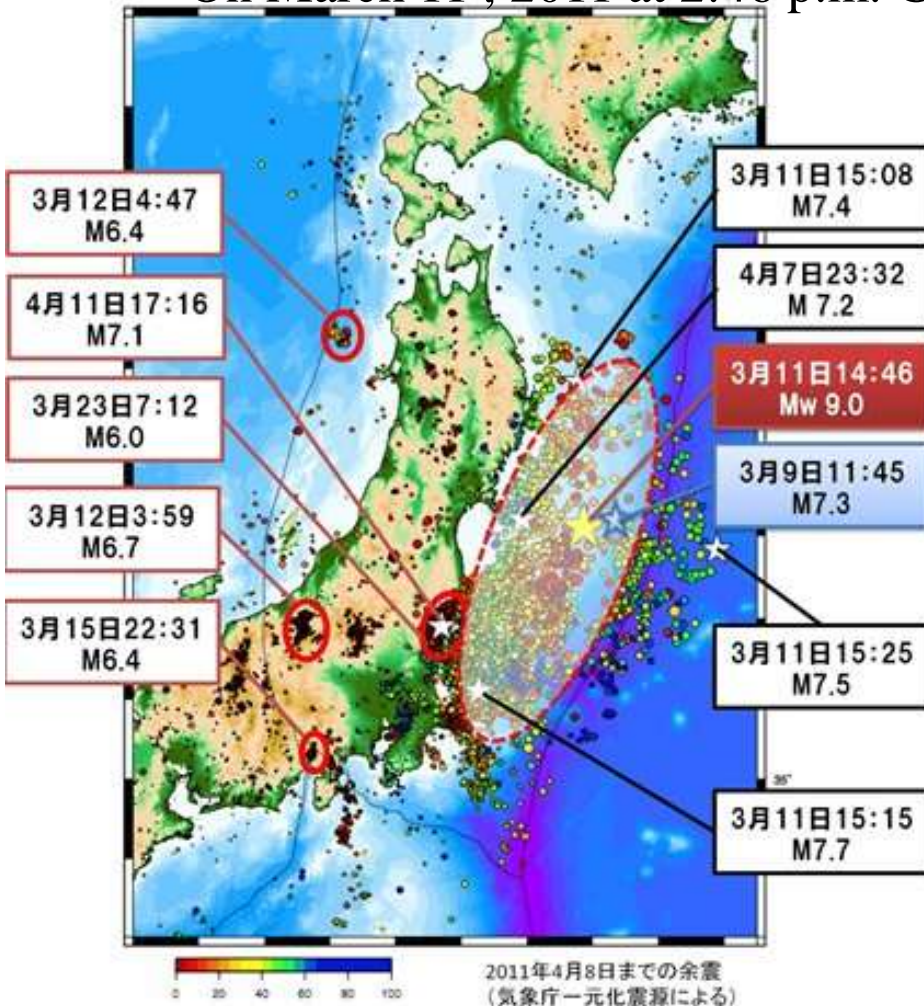
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Research Center for Education in International Understanding

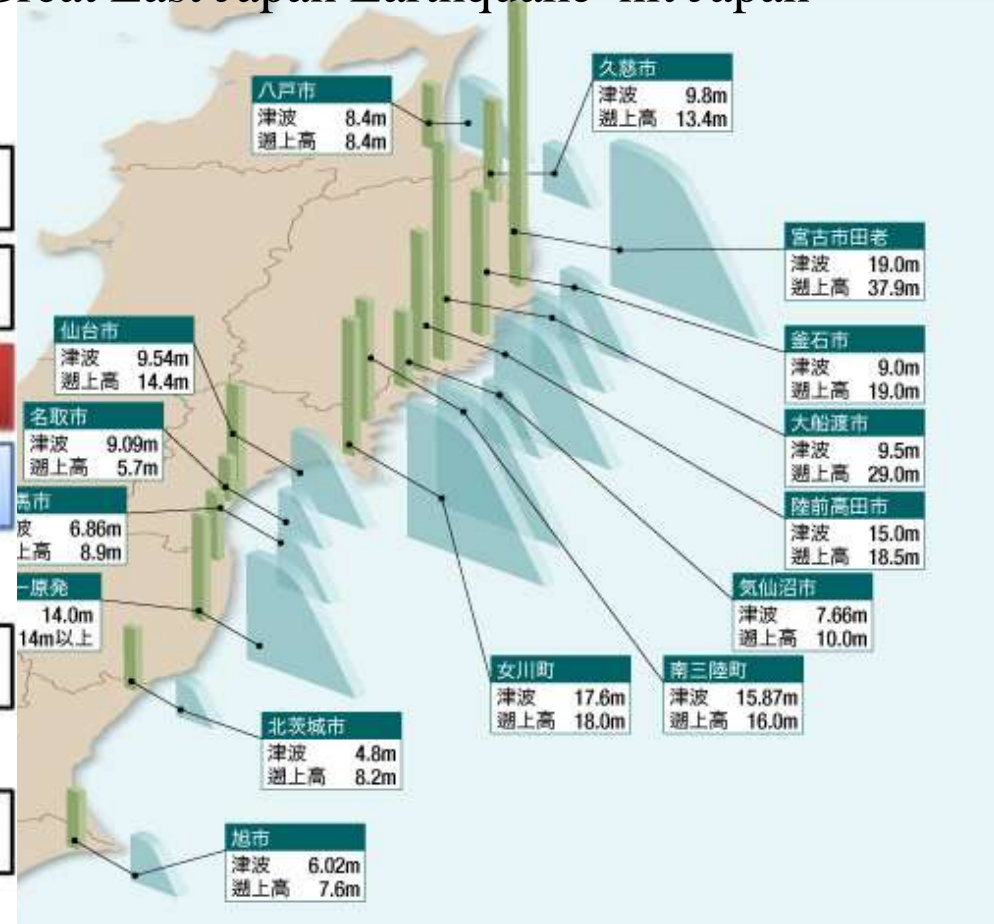
Support Center for Revival in Education

A Magnitude 9 Huge Earthquake and Big Tsunami Wave

- On March 11, 2011 at 2:46 p.m. Great East Japan Earthquake hit Japan

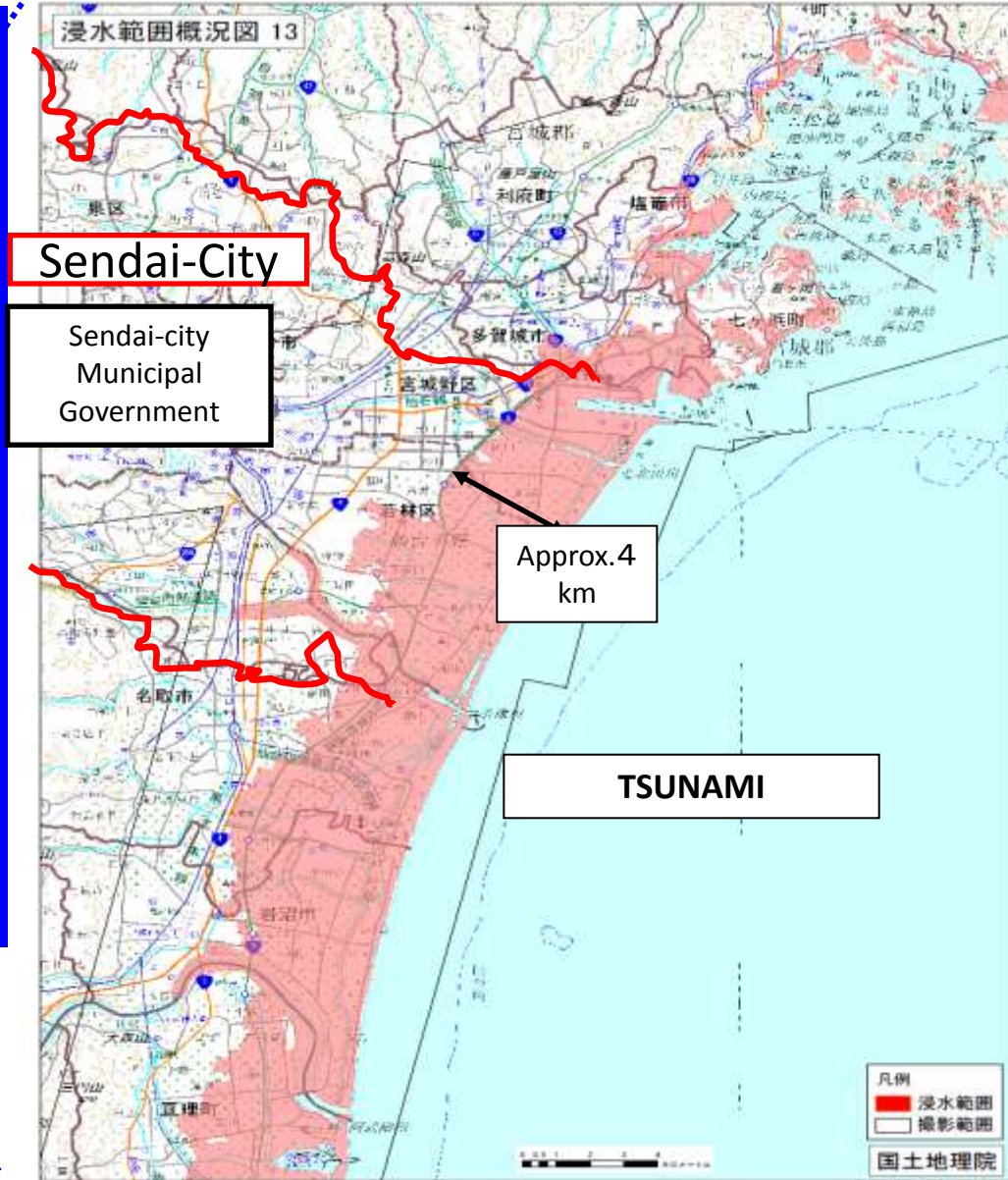
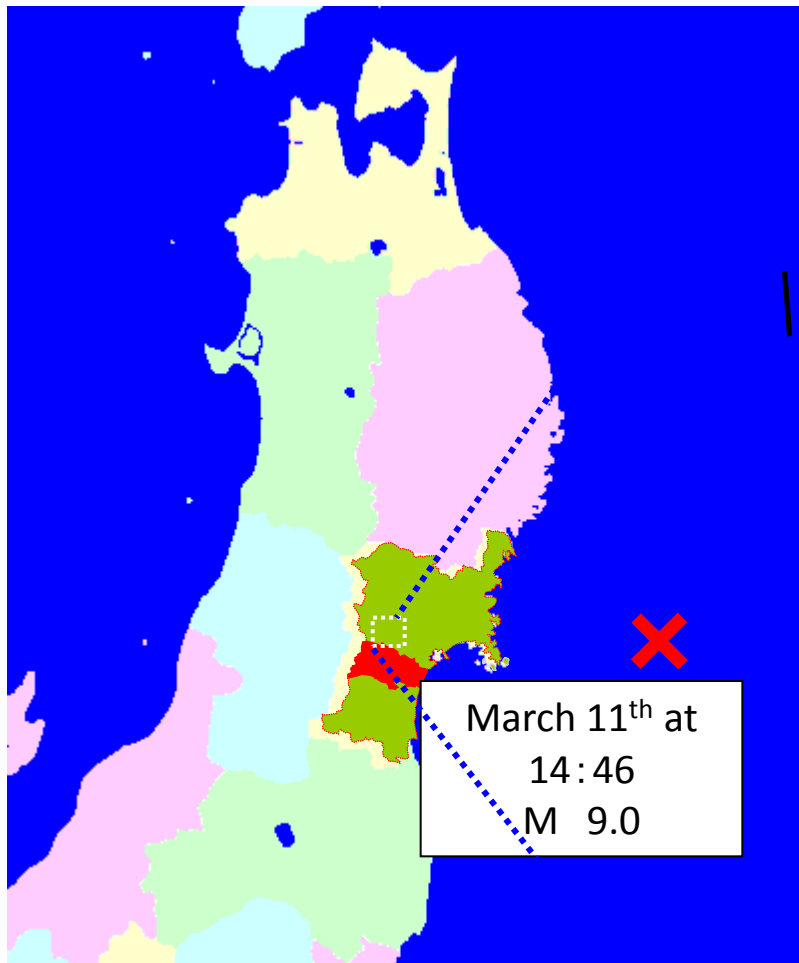


The maximum seismic intensity was 7.



The maximum height of Tsunami was reached 40M.

Location of Miyagi Pref. and Sendai City

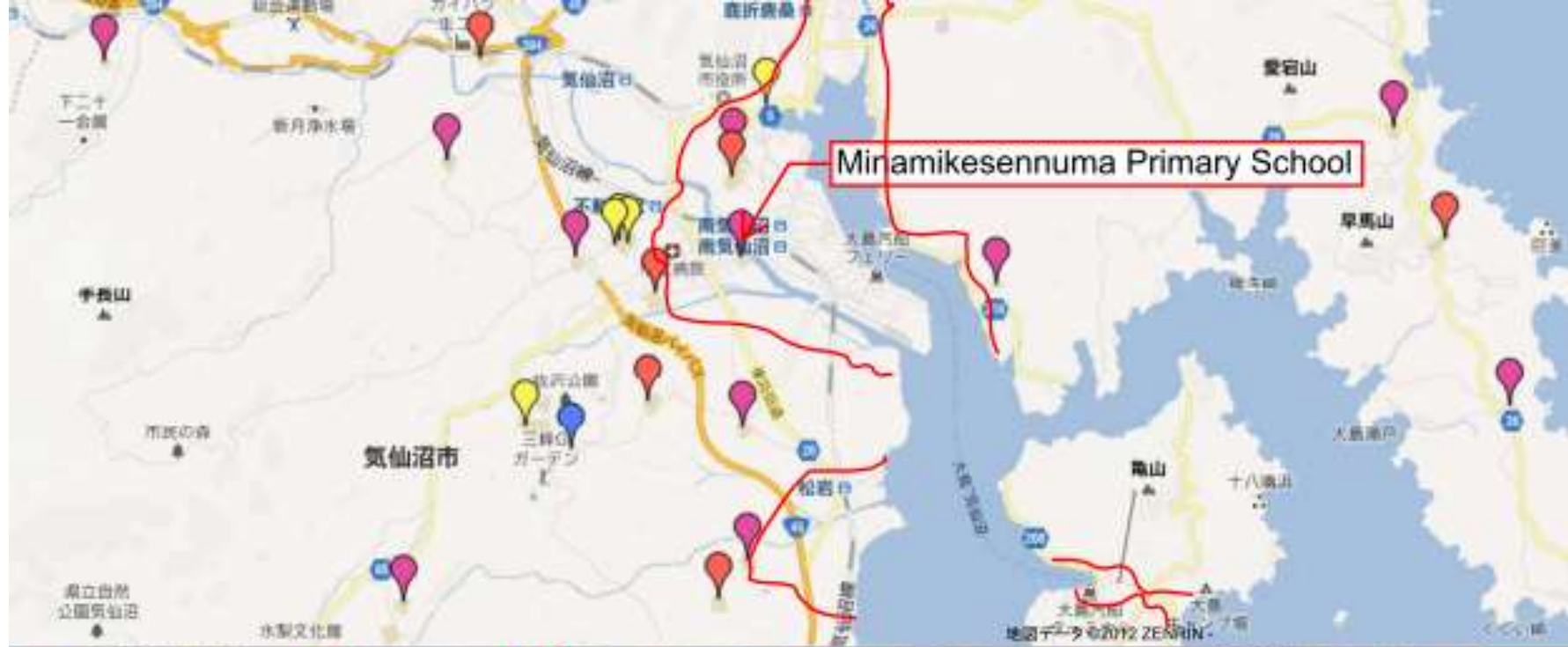


The Condition of the Educational sector in Miyagi Prefecture

- Loss of life (deceased in Miyagi Prefecture only): Total 380 students
 - Kindergartens: 64 students
 - Primary 142 students
 - Junior high schools and high schools (including special support education schools): 126 people
- Teaching staff: 19 people (number of people whose safety is unknown: 3 people)
- Damage to facilities (only in Miyagi Prefecture): 754 (including dormitories, kitchens, etc.) schools
- About 1327 children lost their parents in Tohoku Area.

Cause of the serious damage

- **Large parts of the lowlands were flooded.** (The Sendai Plain, Natori City, and Yamamoto town etc). **Tsunami ran up rivers and narrow valleys** (Kitakami river etc.).
- One of the reasons why damage in the lowlands was extraordinarily serious was that **people could not expect such a massive tsunami.**
- Many tsunami warnings had been issued but the height was from 10 to 60 centimeters at maximum. This fact melted away the cautiousness with tsunami in people's minds.
- In addition, many of the areas along rivers were away from the coast. As **people could not look at the sea,** they could not feel that the tsunami was really happening.



2011. 4. 6











TSUNAMI – Sendai

H23.3.11 15:50頃 仙台市消防局へリ
撮影 仙台市





SENDAI CITY March 18th





Type of schools in this disaster

The roles of schools are categorized into three:

- **Category I : Schools directly damaged by the tsunami**
- Students and local residents were evacuated to school from fear of the tsunami, and then the first and second floors of the school buildings were submerged and therefore isolated.
- **Category II : Schools that played the role of shelters**
- Schools located between a flooded area and a safe area and accommodated many evacuees, including local residents who escaped from the flooded area.
- **Category III : Schools that did not play the role of shelter**
- Schools outside the area flooded by the tsunami where no local residents came to be sheltered.

Category I

Schools directly damaged by the tsunami

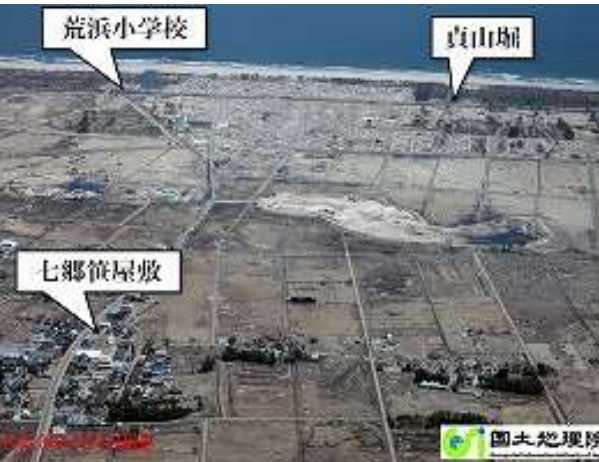
- Although evacuation from the tsunami was called for over the community broadcast system after the earthquake, people could not catch what was said in actuality.
- Mobile telephone lines were tied up immediately after the earthquake and **no wireless station was available. There was no communication method** to seek help from police, fire station, or school board and they became isolated.
- When floods came, tragedy took place in front of the students; their houses or family members were swept by the tide. **Teachers made painful efforts to keep such dreadful scenes away from children's eyes.**



Category I

Schools directly damaged by the tsunami

- Local residents evacuated to the school. **Relief supplies in stock, including blankets, emergency food, drinking water, and electric torches, were not enough** at all, and they were not supplied to all evacuees.
- No heating was available. Evacuees used newspaper and curtains to ward off the cold.
- They must fight against not only submerging and isolation but also **secondary disasters** including burning floating debris and forest fires.
- While they were waiting for rescue, evacuees **panicked in the psychology of crowds (in fear of explosions and electric shock)**.
- The flushing function of toilets became out of order. How to establish temporary toilets (e.g., using water in swimming pools) was important.



Category II

Schools that played the role of shelters

- A contingency **planning manual** says that a shelter shall be established by **persons dispatched from a city office** when a disaster strikes. In actuality, no transportation was available, **no one was dispatched to support the shelter.**
- It was difficult for school staff members to operate shelters. **The members of local residents' organizations, including residents association and fire-fighting teams, could voluntarily operate it determines the quality of the operation**
- **Mutually supportive relationships were the key to the smooth operation of shelters.**
- The volume of relief supplies in stock, **including blankets, emergency food, and drinking water, was not enough at all** compared with the number of evacuees.

Category II

Schools that played the role of shelter

- After the disaster, whether stores and residents in the vicinity of the school worked together to provide food, blankets, etc., also determined the environment of the shelter.
- It was too cold in shelters with no heating equipment. Some shelters asked evacuees to stay in cars parked in schoolyards to ward off the cold.
- Measures to prevent group infection were required when a number of residents stay together in school buildings.

< Unexpected Case >

- Accommodating all local residents means accommodating people with mental disease or the homeless. In addition, precautions against crime were required.
- Some schools in the heart of a city or along railroad lines had to accommodate as many as 2,500 evacuees, if only temporarily.

Schools that played the role of shelters



Category III

Schools that did not play the role of shelter

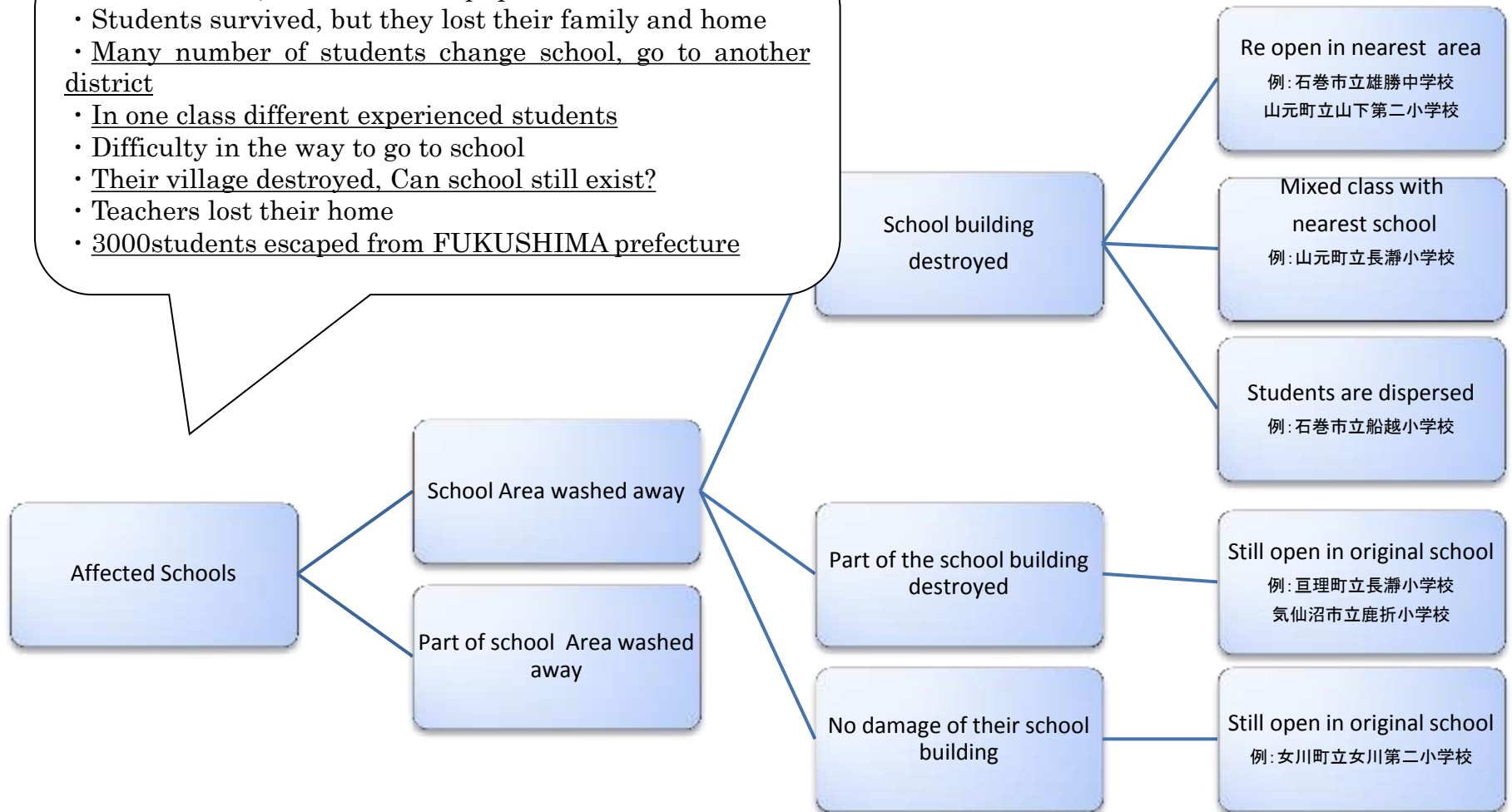
- Some schools outside the disaster-stricken area had no damage and did not need to provide shelters.
- They played the role of a relay point for relief goods at first.
- Later, after the **Self-Defense Forces had arrived**, they became lodges and bases of operation.
- **Corpses were carried into the schools** that had no other role and were vacant. Many of them had to be used as mortuaries.

Schools played the role of a relay point



Research of Suffered school by Miyagi University of Education

- School moved, lack of school equipment.
- Students survived, but they lost their family and home
- Many number of students change school, go to another district
- In one class different experienced students
- Difficulty in the way to go to school
- Their village destroyed, Can school still exist?
- Teachers lost their home
- 3000students escaped from FUKUSHIMA prefecture



Category 1
Schools which were
directly suffered by
Tsunami

- No way to communicate with outside.
- People are always panic.

Category 2
Schools which
became evacuation
center

- The shortage of food, water and electricity.
- School teacher cannot control the system of evacuation center.

Category 3
School located at
the back of
disaster area

- The bodies of the victims were laid in the school.
- Military request to use the school building for their stay.

Wir wollen helfen!

... mit einem Japanfest
im Helene Lange Gymnasium
am 17. Mai 2011, 12.30 - 15.00 Uhr
wollen wir mit vielen Aktionen und Ideen die
japanische Kultur, das Land und seine
Eigenheiten präsentieren.

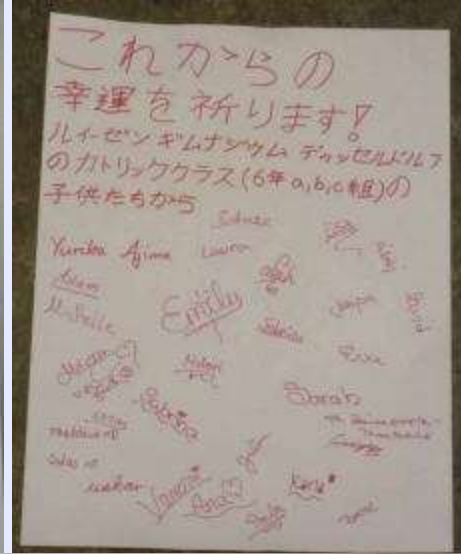
Gegen diese Katastrophe gibt es vieler aus dem besten
Faktor der japanischen Kultur zu erleben. Wir haben uns
auf ihre und einen Besuch (mit adaptionen) wie die
Utsuro-Projektarbeit, die Japan-Tüte am Ende eine
schöne Spendenstunde gewähren und so den
Menschen in den betroffenen
Helfen zu können!

... wir sehen uns im H.L.G.
Lagenstraße 32, 20144 Hamburg

私達は助けたい!

Danke!

Wir freuen uns auch über Einladungen auf unser Japanfest!!! (Telefon: 040 432 2022/493) (Fax: 040 432 2022/494) (E-Mail: japanfest@gymnasium-hl.de)



Loss of local community and school districts

- After 6 months many residents moved to temporary housing **remote from the original place or to new houses they found by themselves.**
- It became difficult to maintain the local society and school district and the school itself.
- Some schools were to be abolished because the school buildings were submerged and communities were lost.

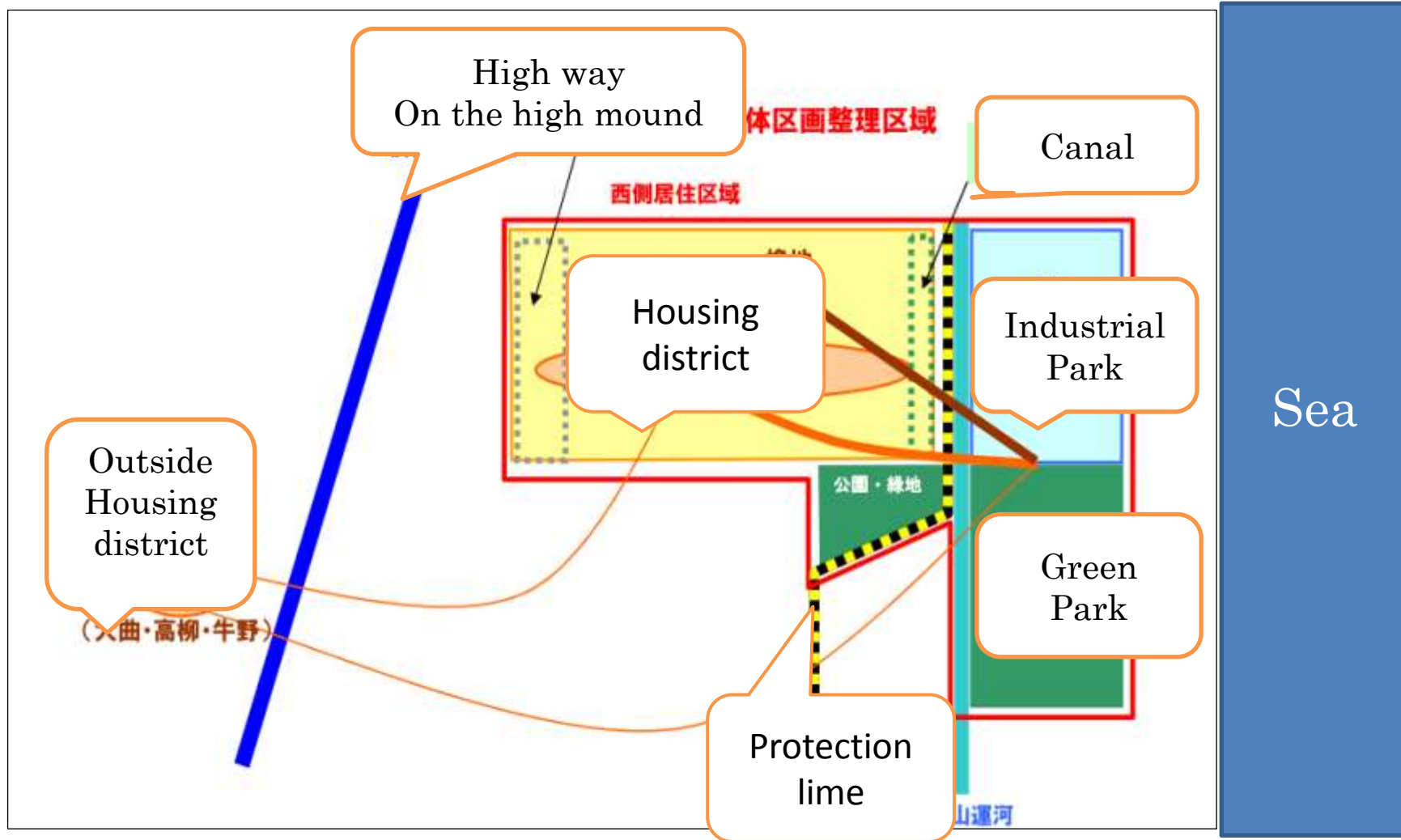
<For Creating new local community>

- One is **the difficulty in building a consensus due to the conflict of opinions between the residents who want to return and those who do not.**
- If there is no prospect for the recovery of local communities, there is no prospect for the rehabilitation of schools.

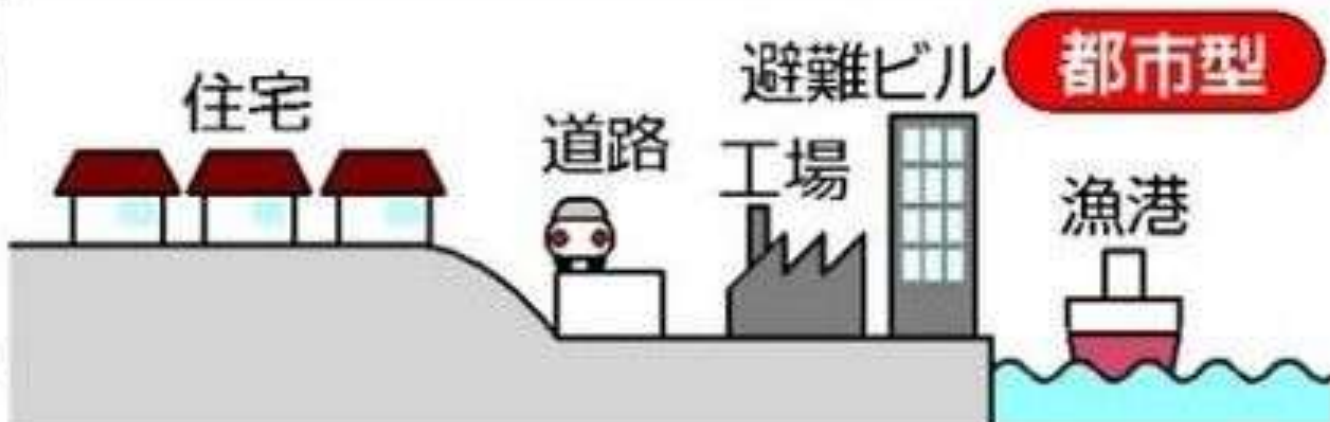
Plan for the recovery of the damaged area

- A typical example is the Yuriage area of Natori City. The 121.8-hectare damaged area is subject to the plan.
- Approximately 80 hectares are designated as a housing district.
- **The ground to the west of the canal will be raised by some six meters**, and public housing (for 700 to 800 households of sufferers), public facilities, and schools will be constructed.
- On the other hand, the 42-hectare area to the east is designated as the fish processing and other facilities, marine sport facilities and green spaces will be built.

Recovery plan of Yuriage area in Natori City



宮城県が市町に提案する復興のイメージ



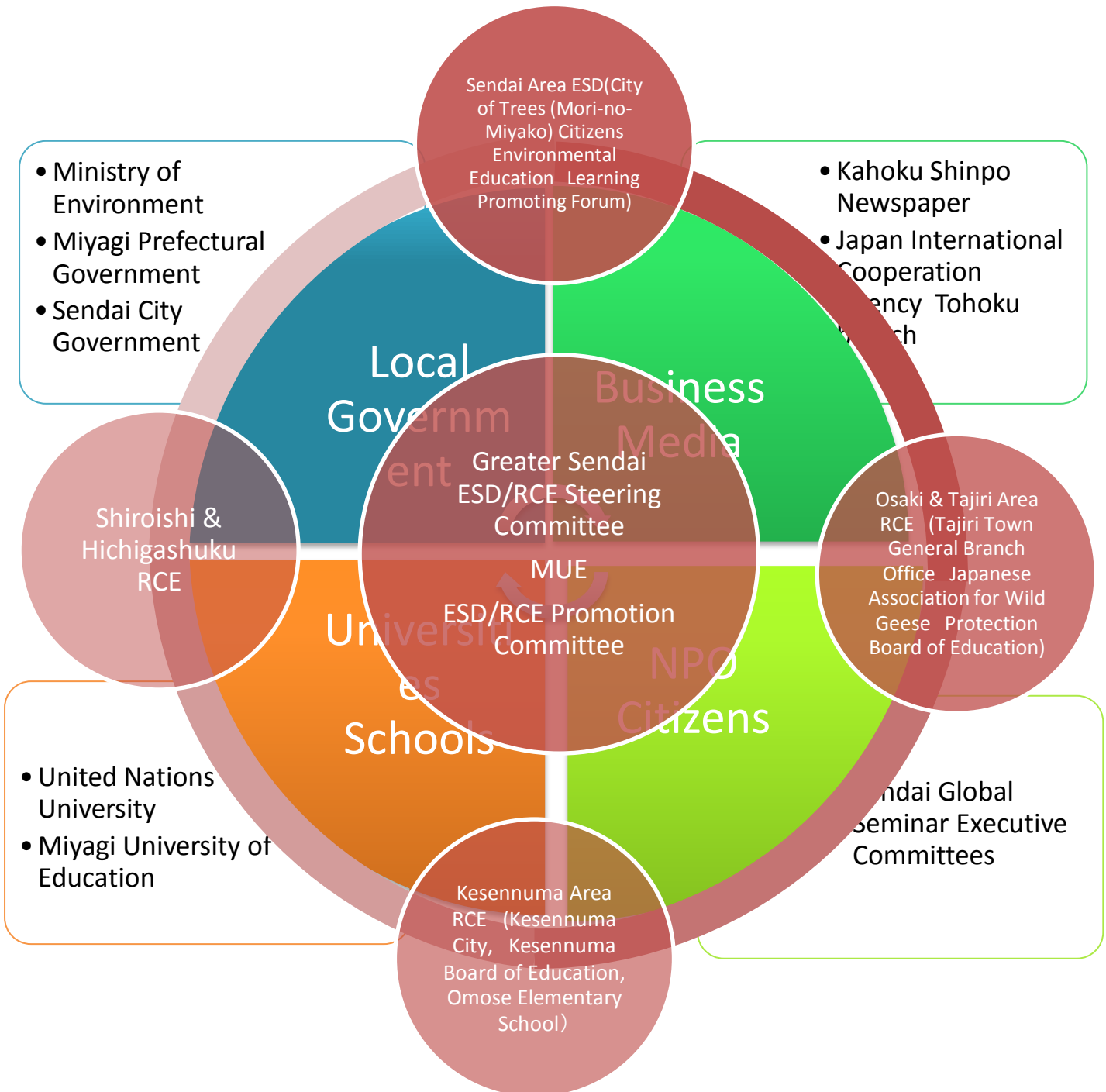


An aerial photograph showing a coastal town in Japan, likely after a tsunami. In the background, a large, turbulent wave is crashing against a dense line of tall, thin trees. The town below consists of several houses with dark roofs and light-colored walls. A parking lot in the foreground is filled with many cars. The overall scene depicts the aftermath of a natural disaster.

What the UN's sustainable community development suggests in this region?

The Greater Sendai Area ESD Projects by UNU

- The DESD started in 2005, and in the same year, the Greater Sendai Area ESD Projects, in which Miyagi University of Education involves, were designated as the first RCE in the world (one of seven regions in the world) by United Nations University with six other regions including those in foreign countries.
- The Greater Sendai Area consists of an institution of higher education Miyagi University of Education and local communities Sendai, Kesenuma, and Tajiri, Osaki-shi.
- **A variety of ESDs concerning the environment, disaster prevention, food, traditional culture, and international understanding are put into practice at the member schools.**



List of Kesnenuma ASPnet schools

Mizunashi Elementary School	Tsuya Primary School
Urashima Elementary School	Hashikami Junior High School
Oshima Elementary School	Niitsuki Junior High School
Omose Elementary School	Karakuwa Junior High School
Shishiori Elementary School	Ohshima Junior High School
Shinjo Elementary School	Jonan Junior High School,
Nakai Elementary School	Koharagi Junior High School
Hakusan Elementary School	Matsuiwa Junior High School
Hashikami Elementary School	Ohya Junior High School
Matsuiwa Elementary School	Kesenuma High School
Tsukidate Elementary School	Kesenuma-West Senior High School
Ochiai Elementary School	Kesenuma Junior High School
Karakuwa Elementary School	Shishiori Junior High School
Kesenuma Elementary School	Hashikami Junior High School
Minami Kesenuma Elementary School	Niitsuki Junior High School
Kujo Elementary School	Omose Junior High School
Koharagi Primary School	Hashikami Junior High School
Magome Primary School	Hashikami Junior High School

Study of UNESCO Associated Schools in Miyagi

- Many kinds of project are running in Miyagi prefecture region schools:
 1. Environmental education (nature in the region, water environment, biological diversity, agricultural cultivation, global warming, green development)
 2. International understanding/communication
 3. **Disaster prevention education (tsunamis, earthquakes, volcanic activity)**
 4. Inheriting culture/traditional arts (Kagura dancing, traditional arts/culture)
 5. Welfare
 6. Special needs education
 7. Dietary education (organic farming, cultivation, slow foods, food supply problems)
 8. Industry
 9. Human rights

Case of Hashikami Secondary School
Tsunami Drill before 3.11
proposed Teacher Kikuta 2010

私たちは未来の防災戦士

宮城県気仙沼市立階上中学校

総合防災訓練 共助③



共助

炊き出し班:カンパン, ハイゼックス炊飯, アルファ米



避難所班:畳を敷いたり, 掲示板を作成

総合防災訓練 公助④

公助



New Relationship between School and Local Community from the Lesson of East Japan Earthquake 3.11

- The idea of the **sustainable development of society** proposed by the U.N. gives important suggestions to relationship building between local communities and schools.
- How effective it is when we cope with natural disaster to have had a cooperative relationship between the school and local communities.
- For local communities where residents and students know each other, it is easy for the school and local communities to work together to further develop the community.
- We are committed to tackling the local issues, strengthening the ability to fight against disasters, and contributing to the restoration of local communities through the activities of RCE and UNESCO.

<Reference>

- Tomonori ICHINOSE, “An Observation on the Deployment of Education for International Understanding and Education for Sustainable Development through the Practice of Miyagi University of Education”, *14th UNESCO-APEID International Conference Education for Human Resource Development*, 21-23 October 2010, Bangkok, Thailand
- Yoshikichi Abe and Tomonori Ichinose, “Volunteers and Youth Role in Post disaster Scenario: Role of Miyagi University of Education”, Rajib Shaw and Yukiko Takeuchi, *East Japan Earthquake*
- Tomonori ICHINOSE, “ESD Activities of UNESCO Associated School Project Network and Cooperation with Local Universities”, *Synergies and Linkages EFA,ESD and ASPnet Final Report of Asia-Pacific Forum on Educational Cooperation: Synergies and Linkages of EFA,ESD and ASPnet for Sustainable Asia and the Pacific*, 19 -21 February 2011, ACCU, Tokyo,pp.296-297.

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