



Readings from Newspaper (Part A)

The Tsunami in March 11th, 2011

What can we learn from the disaster beyond the expectation in the case of Japan?



Center for Research on International Cooperation in Educational Development (CRICED)

February, 2012

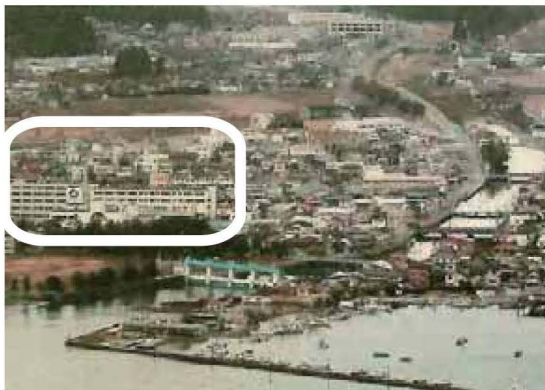


南三陸町

Pictures of Minami Sanriku Town

<http://www.youtube.com/watch?v=8vZR0Rq1Rfw>

A Video from Shizukawa High School



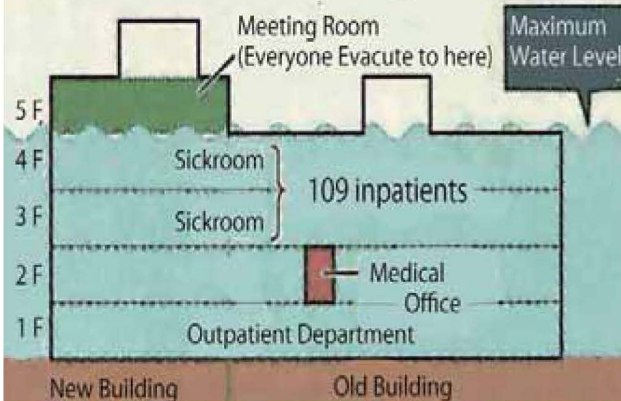
Before Tsunami



After Tsunami

↓ Shizukawa Hospital

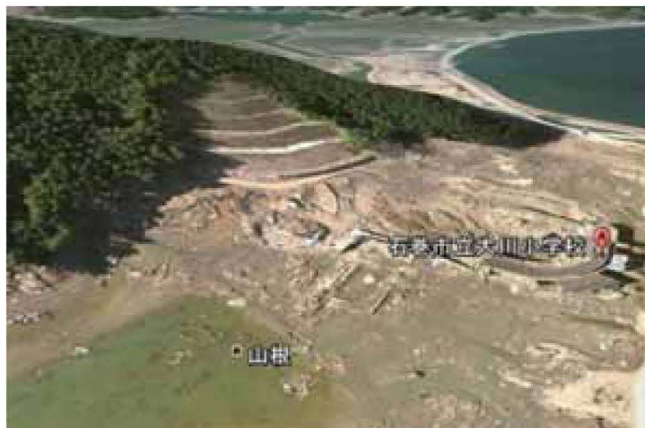
The Sketch of The Public Shizukawa Hospital



Town Hall for →
Emergency
Preparation:
Tsunami (from
its roof top) ↓



Okawa Elementary School beside Kitakami River (for 4 & 6)

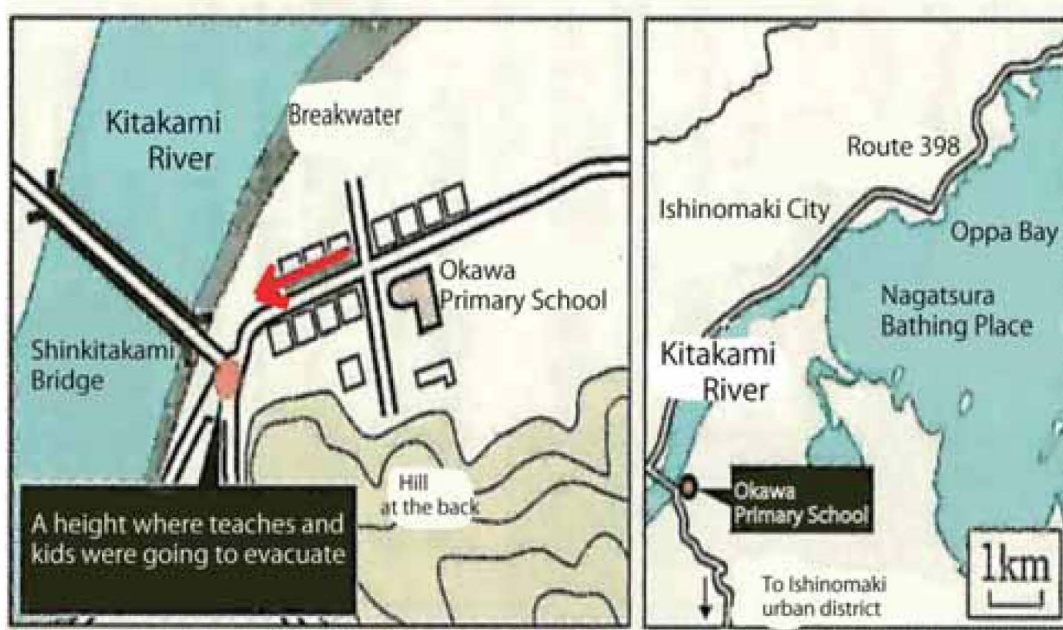


Okawa Elementary School



Shinkitakami Bridge

6 Tsunami Hit Group of School Children from the Front



Ishinomaki, Okawa Elementary School, 70 percent Killed and Still Missing. Immediately After the Earthquake, During the Evacuation.

According to testimony from witnesses, at Okawa Primary School in Ishinomaki city, Miyagi prefecture, out of 108 students, 70 percent were killed and still missing during the evacuation from the tsunami. Students were hit by the backward flow of Kitakami River caused by the tsunami, while evacuating together in a group. The school, to meet the needs of parents who want to know what was the situation at the time, will provide a session on 9th night.

4km from the Mouth of the River

Okawa Primary School is located 4 kilometers from the upper stream of Oikawa bay and the mouth of a river call Kitakami River in Kamatani area, which is the largest river in Great East, Tohoku. According to the board of education in Miyagi prefecture, out of all 108 children at Okawa Primary School, 56 died and 18 remain missing. Moreover, out of 11 teachers at the playground, 9 died and

one is still missing. The school principal was out of the school during the earthquake.

According to the testimony of parents and residents, right after the earthquake at 2:46 pm, with the instruction of teachers, children moved from the building to the playground. Some were still wearing inside shoes and helmets. five or six parents' cars came to pick up their children; children clung to their mothers, cried "I want to go home soon".

At 2:49 pm, a large tsunami warning was issued. Teachers were considering what to do on the playground. The school buildings, littered with broken window glass, was also in danger of collapse duaring the aftershocks. The hill behind the school had poor footing on steep slopes. From such a situation, they decided to head for the Shinkitakami Bridge, which is about 200 meters away from the school, because the bridge was at a slightly higher place. The disaster management manual handbook provided by the city only says, "Evacuate to higher area," and the specific evacuation area was left up to each school.

Unexpected

Around 3:10 pm, there happened to be a 70-year-old man who spotted a group of children evacuating the school. "Students looked frightened and they were led by teachers." The tsunami hit the children immediately after that. A dreadful sound was heard. The men and children began to run in the opposite direction. A giant wave rose out from the Kitakami River to the lower district including their school.

By putting together the testimony of men and citizens, the tsunami went from the front row of the children and swallowed them. Teachers and several children at the back followed the 70 year old man, ran up the hill behind the school and survived.

The tsunami even went 5 to 10 meters up the hill. Prior estimates were that the tsunami would be 5 to 10 meters high near the river, and less than one meter high around the school. However, the tsunami has rose 10 meters over the hill behind the school and covered the two-story school. Even the Shinkitakami Bridge, which



児童の列 前から津波

7割死亡・不明 石巻・大川小

地震直後、避難の途中

保護者にきょう説明

【石巻市】大川小学校の児童らと保護者ら約100人が、地震直後に避難した。津波が押し寄せた瞬間、児童らは校舎から逃げ出し、校舎は崩壊した。児童らは、校舎から逃げ出し、校舎は崩壊した。児童らは、校舎から逃げ出し、校舎は崩壊した。



河口から、大川小学校は、津波の被害を受けた。津波は、大川小学校の校舎を崩壊させた。児童らは、校舎から逃げ出し、校舎は崩壊した。児童らは、校舎から逃げ出し、校舎は崩壊した。



大川小学校の校舎は、津波の被害を受けた。校舎は崩壊し、児童らは校舎から逃げ出した。校舎は崩壊し、児童らは校舎から逃げ出した。

絶品アワビも津波被害

三陸沿岸「全滅の可能性」

消費地の中国 在庫確保に奔走



【大川小学校】津波の被害を受けた。津波は、大川小学校の校舎を崩壊させた。児童らは、校舎から逃げ出し、校舎は崩壊した。児童らは、校舎から逃げ出し、校舎は崩壊した。

保護者の思い
大川小学校の児童らは、地震直後に避難した。津波が押し寄せた瞬間、児童らは校舎から逃げ出し、校舎は崩壊した。児童らは、校舎から逃げ出し、校舎は崩壊した。

山口組幹部、出所
山口組幹部の出所が、関係者の注目を集めている。山口組幹部の出所が、関係者の注目を集めている。

山田組幹部、出所
山田組幹部の出所が、関係者の注目を集めている。山田組幹部の出所が、関係者の注目を集めている。

南三陸町に臨時診療所

地元医師ら集結 「地域医療再建の拠点」

【南三陸町】津波の被害を受けた。津波は、南三陸町の町民に大きな被害を与えた。南三陸町の町民は、津波の被害を受けた。南三陸町の町民は、津波の被害を受けた。



南三陸町の町民は、津波の被害を受けた。南三陸町の町民は、津波の被害を受けた。南三陸町の町民は、津波の被害を受けた。

4 Parting with mother

I said "Thank you" several times and swam desperately.



"Dearest mother, interesting, tender grandmother. Everyone has gone."

The Sendaiikuei High School first grade Saori Endo (sobriquet) visited Europe for the donation activity of "the Ashinaga scholarship association" which supported the child who lost a parent from disasters. She told about the difficulty and sadness in parting with her mother (35) in Paris.

"After finishing the graduation ceremony at my junior high school, I was at my house in Ishinomaki, in Miyagi prefecture, and that's when we felt the huge earthquake. The earthquake was intense but our house was 4 kilometers away from the Kitakamigawa River. I was telling my mother, my grandmother and my great grandparents that, "The tsunami won't come this far." Soon after that, an abnormal back flow of river water drifted

out to the house. I was thrown in to black water that smelled like gasoline. My body was stuck between hard objects and there was no way out. "I'm gonna die," I thought. But before I knew it, I had drifted with a heap of rubble and ended up on top of a storage building at the nearby Okawa Primary school.

"Sao," I heard a very familiar but weak voice. I looked into the crevice between the debris. I saw long black hair that reached all the way down her back. It was my mother. She was stuck in a heap of rubble, and her leg was twisted in a distorted position. I tried hard to help her out, but I could not move the debris. I was also severely injured. Some nails were stuck into my legs, and they were ripped and torn, and my back was cut and injured. The heap was surrounded by dirty water and it was freezing cold. I didn't know when the tsunami would hit us again. I told myself, "If I stay here any longer, I might die." I said "goodbye," and "I love you," a million times to my mother, and jumped into the water. I swam for 100 meters and reached the rooftop of an elementary school. I spent the night there, and I was rescued the day after. A few days later, my mother's body was found."

She lost her great-grandmother and a grandmother. And she left her grandfather (60) who was working at Ishinomaki city office and now lives alone in Sendai. On a street of Tokyo, New York, Paris, and at an international conference of China, she told about parting with her mother. It is from one thought that she does not want you to forget this disaster. "If my family lives, I may hate to talk about such a story." she said without giving her name.

(Yomiuri Newspaper: December 25th, 2011, p.35 by Asako Ishizaka)

「ありがとう」何度も告げ 必死で泳いだ

ひと
物語
被災地から

震災から9か月たった12月11日。パリは最低気温が氷点下の寒さだったが、日曜日とあってエッフェル塔前の公園は観光客や家族連れでにぎわっていた。山台市の仙台育英高校1年、**あしなが**さんは、在留邦人や観光客ら約100人に語りかけた。

「最愛の母、面白くて優しいおばあさん……。みんなもういないのです」

災害などで親を亡くした子供を支援する「あしなが育英会」の募金活動で来欧した曾祖母さんは、震災の惨状を話しながら、母35歳のつらく悲しい別れを思い出していた。

あの日、中学の卒業式を終え、宮城県石巻市の自宅にいたところを地震に襲われた。激しい揺れだったが、自宅は北上川の河口から4キロは離れている。母、祖母（64）、曾祖母（83）と、「津波はこまで来ないだろう」と話した直後、音もなく川を逆流してきた津波が家を押し崩した。

母との別れ 世界で語る



エッフェル塔前の公園で津波とあつた別れを語る曾祖母あしながさん（11日、パリで）＝三井新聞提供

真っ黒な水の中に放り出され、ガソリンの臭いが鼻をついた。何か硬い物に体を挟まれ、自由がきかない。「死ぬのかな」。そんな思いもよさなかったが、気づくと、近くの大川小学校の倉庫に引っかかって横み上がった。がれきの山に流れ着いていた。

弱々しいが、聞き慣れた声。自分が呼ぶ。がれきのすき間に目を凝らすと、腰まであ

る長い髪が見えた。母だった。木材に挟まれ、足が不自然に曲がっている。助け出そうと木材に手をかけたが、ビクともしない。

自分も両手を負っていた。足などにクギが何本も刺さる。背中も切れていた。がれきの山は開けた水に囲まれ、凍えるほど寒い。またいつ津波に襲われるかわからない。「ここにどまりまったら死んでしまう」と思った。「大好きだよ」「ありがとう」

う。母に何度も別れを告げて水に飛び込んだ。100メートルの必死で泳いでいた大川小学校の屋根で一晩過ごし、救出された。数日後、母の遺体が見つかった。

祖母と曾祖母も失い、市の仕事をする祖父（60）を石巻に残し、今は仙台で独り暮らしして通学する。支援してもらったことをきっかけに、あしなが育英会の活動にも毎月から携わっている。

「思い出しても涙の止まらない悲しい選択でした」

東京の街頭で、同時テロの爪痕残る米・ニューヨークで中国・大連の国際会議で、母との別れを赤々と語った。震災を忘れてもらいたくないとの一心からだった。ただ、「もう戻ってこない」と再認識するのはつらい。もし家族が生きていたら嫌がる気がして、公の場で名前を口にせずにいる。

最近、同じ被災地でも震災に対する温度差があるように感じる。高校の教習で震災が話題になることはあまりないが、親を亡くした右側の友人からは「死にたい」というメールが毎日のように届く。「復興にはほど遠いのに、震災が風化し始めている。どうすればみんなに伝えられるのか」。焦りも覚える。

前向きに生きなさいと思う反面、祖母、曾祖母、そして母を思っただけの自分がある。気持ちが行きつ戻りつしながら、新年を迎える。

（石坂麻子）

あしなが育英会は、東日本大震災で親を失った子供たちを長期的に支援するため寄付を募っている。問い合わせは、同会（03・3271・0800、tsunami@ashinaga.org）へ。

虚為の密告され帰国命令

帰国命令が出た後、妻と共にホテルを転々としていたあしながさんも99年3月、北朝

From Yomiuri News Paper

Readings from Newspaper

(Part B)

Learning from

The Tsunami

in March 11th, 2011

Ability to survive 6

Thinking about Moral Issues in the Case of Disasters

A lesson on Moral Education in a sixth-grade classroom at Fujimi Elementary School in Shizuoka prefecture started with the following question:

"A big earthquake occurs when you are at home with your dog. You are not injured, but a part of the house has collapsed, and you are scared of possible aftershocks. Are you going to bring the dog with you to the public shelter?"

Of the 32 children, 24 replied; "I will bring the dog". A main reason given was, "The dog is also a member of my family" On the other hand, eight children replied "I will leave the dog at home." The reasons they gave were, "The dog's cry would annoy people at the shelter," "The available food would not be enough for the dog."

After the children responded, Ms. Kayo UENO, a fourth year student of the Faculty of Education, Shizuoka University, who played the role of "teacher" on this day, asked the children: "What if you find people at the shelter who are allergic to animals? Is there any possibility that your dog may become a stray if you leave it at home?"

After contemplating these two questions, two children changed their opinion from "I bring the dog" to "Probably I leave it at home."

Kousuke KOIZUMI, a 12 year old boy, explained why he changed his opinion. "I believe that the animal's life is important, but I can't bother allergic people. It might be better to leave it to the association of animal protection."

"There is no right answer for the teacher's question" said Motoki FUJII, Associate Professor, Faculty of Education, University of Shizuoka, who developed moral education in the context of prevention of disaster. What is the purpose of such lessons?

"It is to raise children's awareness of the prevention of disasters by thinking for themselves."

The 2011 Great East Japan Earthquake triggered the idea of "prevention of disasters." A town council civil servant, who kept calling over a microphone for people to evacuate, did not get to evacuate, and she lost her life in the Tsunami. A fireman who fled too late as he went to the riverbank in order to close a water break also died. Examples of those who died in order to protect the lives of others have been reported in the press.

In the event of a disaster, people encounter various situations in which it is very hard to judge what to do. The ultimate purpose of "Moral education in disaster prevention" is for people to find the best solution for themselves under these circumstances.

For the question regarding disaster and pets, it may be necessary to build houses that are earthquake resistant, so that there is no need to go to the shelter after an earthquake.

Assuming the earthquake damages the house, perhaps people could ask relatives living far away if they could keep their dogs temporarily. "I hope people will find solutions like these examples as a result of the lesson," said Associate Professor FUJII.

Last year, Mr. FUJII developed a teaching material entitled "Lesson development in Moral education" with 162 pages of lesson plans through mock lessons for the four primary and secondary schools within Shizuoka prefecture. This year, he is further developing the teaching materials that incorporate feedback and suggestions from teachers in the field. The finished product will be disseminated to the elementary and junior high schools through the prefecture.

* Translator's note: some names that appear in this article are pseudonyms.

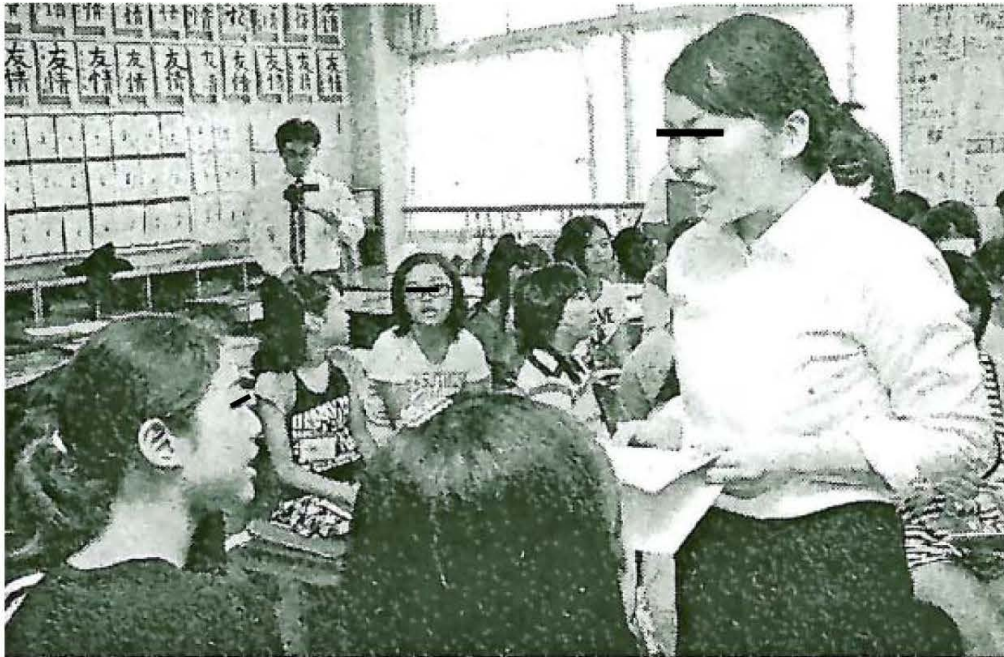


Photo: "What do you do?" Ms. Ueno asks the children for their opinions.

"What do you do?"

Examples of the topics for moral education in the context of prevention during a disaster

- *Distribution of the food; You are in charge of food distribution at the public shelter. Some people say that you should not distribute the food yet as it is too early to do so according to the regulation, but you see some people who are becoming weak because of hunger. What would you do?*
- *Helping your family or the residents of the town; As a member of a fire brigade, you have a responsibility to go around and call on residents to evacuate. However, in doing so, you cannot help your pregnant wife to evacuate. What would you do?*

From "Development of moral education class" Fujii laboratory, University of Shizuoka

静岡市立富士見小学校の6年生の道徳の授業は、次のような問いかけで始まった。
 △自宅に愛犬といて大地震が来た。けがはなかったけど、家は一部壊れ、余震が怖い。あなたは避難所に犬を連れて行きますか？
 児童の答えは、「連れて行く」が32人中24人。理由の多くが「愛犬も家族だから」。これに対し、「置いていく」は8人。理由は「鳴くと、周囲に迷惑がかかる」「犬の分まで食料はないはずだ」……。意見が出そろったところで、この日、『先生』を務めた静岡大学教育学部の4年生の〇〇さん



教育ルネサンス 生き抜く力 6

No. 1651

結局、2人が「連れて行く」から「どちらか」と置いていく」に意見を変えた。
 君12は「動物の命は大切だけど、アレルギーの人には迷惑だし、動物を保護する団体に預けていくのが



災害時の道徳考える

「あなたならどうする？。児童に意見を尋ねる〇〇さん(7月12日、静岡市の市立富士見小学校で)」

いいのかなと思った」と心境の変化を語った。

「投げかけた問いへの正解はないんです」と、この授業「防災道徳」を開発した静岡大教育学部の藤井基貴准教授(36)(教育学部)は言う。

では授業の狙いは何か？
 「自分なりに考えることで防災への意識を高めることです」

きっかけは東日本大震災だった。逃げることなくマイクで避難を呼びかけ続け、津波の犠牲になった町の職員、防潮堤の閉鎖に行き逃げ遅れた消防団員……。住民の命を守るために亡くなった人たちの姿が報道された。

「あなたならどうしますか？」

「防災道徳」で問いかけるテーマの例

▽「食料の配り方」(避難所で食料の配給係になった。規則ではまだ配るなどになっているが、空腹で衰弱している人もいる。どうするか)

▽「家族を助けるか、住民を助けるか」(消防団員として、地域住民の避難の呼びかけに回らなければならないが、そうすると、身重の妻を1人で避難させなければならない。どうするか)
 (静岡大・藤井研究室「道徳教育の授業開発」から)

災害時は、どう判断していいのか深く迷う様々な事態に遭遇する。「防災道徳は、そうした状況のなかでも自分なりに最善の解決策を見いだしていくのが最終的な狙いだ。災害とペットを巡る問いかけでは、震災後も避難所に行かなくても済むように自宅をしっかりと耐震化しておく。震災を想定して、少し離れた親類などに犬の一時預かりを依頼しておく。」「そんな「解決策」にたどり着いてほしい」と藤井准教授は言う。

昨年度は、県内の小中学校4校で模擬授業を行いながら162名の指導案を兼ねた教材「道徳教育の授業開発」を作成。今年度は、現場の先生たちの声を取り入れながらさらに実践的な教材に発展させ、県内の小中学校で普及させる活動を進めると言う。

(小寺以作、写真も)

5 Local wisdom a lifesaver for kids



The wisdom known on the Sanriku coast--the Pacific side of the Tohoku region--as "Tsunami Tendenko" saved the lives of many children in Kamaishi, Iwate Prefecture, when the earthquake and tsunami struck on March 11.

Of 2,900 primary and secondary school students in Kamaishi where more than 1,200 people died or are missing only five children who left school early or were off sick on March 11 were confirmed dead. However, nearly all the other students were confirmed safe.

Since 2005, the Kamaishi city government has invited disaster management education experts to offer advice, and among the lessons' important points was "tendenko". This word was coined from the city's trying history of being hit by tsunami again and again. The word means to "go uphill independently at the time of tsunami coming, not thinking of anyone else, even your family."

Due to a shortened schedule toward the end of the term, about 80 percent of the 184 students went back home from Kamaishi Elementary School. The tsunami hit many school zones except on the mountainous side, but all of the students were safe.

"I was worried about my house and family, but I ran up to a higher place without thinking." said sixth-grader Haruki Matsuda R(subriquet). He was playing with his friends in a residential area near the school when the earthquake hit the city. After that, he was reunited with his family in a shelter.

Prof. Katada of Gunma University Graduate School, a disaster social engineering expert, said "Tendenko is the wisdom based on strong family ties. It has a very deep meaning."

According to Katada, at the time of the 1896 Sanriku earthquake, family members tried to help each other but they failed to escape from tsunami that destroyed the entire region. In the Taro District (then Tarocho) of Miyako, Iwate Prefecture, 1,859 people died and only 39 people survived. The word "tendenko" was developed in Sanriku as a lesson from such disasters.

Katada has taught tendenko's importance since 2005 in Kamaishi, offering a special class at 14 elementary and secondary schools in the city. "You might feel bad escaping the tsunami alone. However, trying to confirm families' safety and whereabouts is the most dangerous thing in such a situation. It's important that you believe that 'They must have evacuated somewhere'." Katada advocates Kamaishi schools conduct disaster drills to go uphill, teach tsunami velocity calculation methods in math class and discuss tsunami experiences during ethics lessons. The schools also encourage students to look for higher ground where they can evacuate on foot, and include evacuation routes in a disaster management map.

Mutual help

The point of tendenko is to stop looking for family members who are geographically far from each other at the time of a tsunami. However, the concept fosters a spirit of mutual aid among the people who are nearby. Katada's instruction helped elementary and secondary school students cooperate with each other to escape the disaster. The tsunami hit the Unosumaicho district in Kamaishi, with floodwaters reaching the third floor of Kamaishi-Higashi Secondary School and the nearby Unosumai Elementary School. Before the latest earthquake, the two schools had conducted disaster exercises together.

At the secondary school, the announcement system had broken down right after the earthquake and was unable to broadcast evacuation calls. However, students were able to quickly

leave the building and gym as they had practiced, and grabbed the hands of elementary school students who were also on the verge of escaping from the building and together ran up to higher ground.

One Secondary school first-grader Daisuke Komori (subriquet), held the hands of two third-grade elementary school girls. One of the girls cried and started hyperventilating, while the other could not speak. "It's OK," he encouraged the girls and they ran to the top of the hill, more than two kilometers from their schools. When the girls knew about the safety of all their friends, they were relieved.

Said Katada: "I've repeatedly told children in class that we might experience tsunamis larger than we expected. It's almost a miracle that such a lot of children were saved. I'm proud of the children for making decisions by themselves."

(Yomiuri Newspaper, Evening, 28th Mar. 2011, p12)

Ability to survive 1

Education in Disaster Prevention: Children Gain “Chi, Toku, Tai (Wisdom and Moral and Physical Ability)”

Emergency training at higher location

School children run along a mountain path surrounded by thick woods. Their teachers encourage them to keep running as some start walking because of fatigue. “Hang on, you will reach there soon”. When they arrive halfway up the mountain, they see the Pacific Ocean.

Ida Elementary School in Kuroshio town, Kochi prefecture, holds weekly emergency training. The children run up to a halfway point on the mountain next to the playground and teachers check the time it takes for the last child to arrive. The best time achieved during the first term was 4 minutes 16 seconds. The expected time of arrival of a tsunami after an earthquake is 10 minutes, but the school tries to reduce the time required even further during the second term, because “We never know what will happen during disasters.”

The school decided to practice weekly emergency training at higher locations when they heard the Cabinet Office announcement about the review committee that was held in March this year. If the Great Earthquake at the Nankai trough occurs, there is fear that Kuroshio town would be engulfed by up to 34.4 meter high waves. The Ida school buildings lie only 65 meters away from the Pacific Oceans and among

the 11 elementary and junior high schools in this town, it is the nearest to the sea. Moreover, it lies at only 5.7 meters above sea level.

The school increased emergency training from twice to three times per week after the Great East Japan Earthquake. However, the school's principal Mr. Hirofumi MAEDA, thought, "This is not enough" and introduced a running program. Running before the start of lessons was introduced for all children in the school for the next two years.

Every morning they run 7-10 rounds (700-1,000 meters) around the playground. He decided to allot one day for the emergency training every week. The route to the halfway point on the mountain behind the school is tough.

During the early days of training, some children slipped and fell down. But now they have learned to avoid slippery places and even if they lose their balance during running, they become better at correcting themselves. After three months, they reduced by 34 seconds the time required to reach the halfway point.

Fear of 34 meters

The training was introduced, because fear of 34 meters high waves changed the children's consciousness. Hiroshi FUZIMORI, a 6th grade elementary school student, not only keeps a bag full of emergency food in his room at home, but he also became neater in arranging items in the drawer of his desk or placing his shoes side by side. "They need to have physical strength, judgment, empathy, respect toward nature and ability to survive. Therefore, the education in Prevention during Disasters gives children "Chi, Toku, Tai (wisdom and moral and physical ability)," said Mr. MAEDA.

At the end of the morning's emergency training in the morning, they shout together to the Pacific Ocean, "Yahoo...!". The teachers hope that

Education in Disaster Prevention: Children Gain “Chi, Toku, Tai (Wisdom and Moral and Physical Ability)”

5

children will feel that nature is not only a threat but also that they enjoy its beauty.

With the support from the town council for maintenance of infrastructure, construction of evacuation routes will be finished by the 2nd term so that the children will be able to go directly to the mountain behind the school from the balcony of the 2nd and 3rd floors. This year the school has also started a program of introducing education in disaster prevention in every curriculum subject. For example, children learn how to calculate the speed of a tsunami during mathematics lessons and have the ability to access information about disasters during Japanese language and Social Studies lessons. The purpose of this program is for children to have practical knowledge and attitude for self-defense.

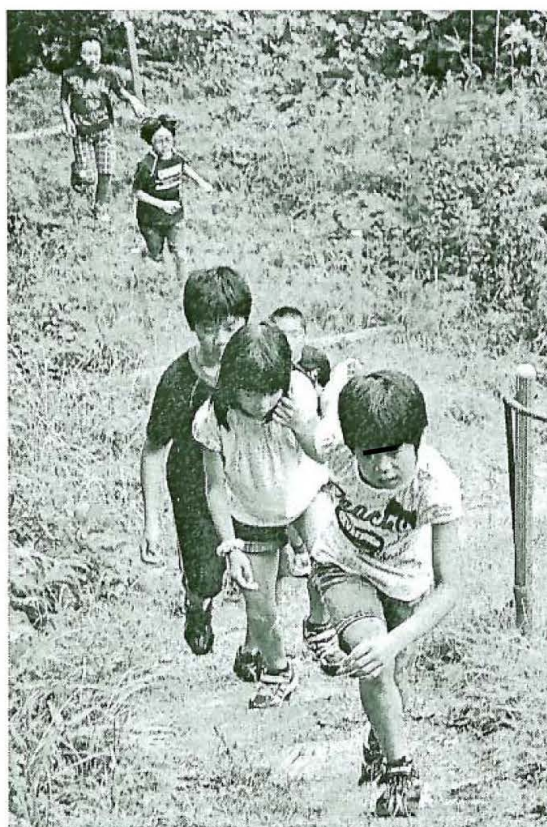


Photo: Once a week in the morning, school children run along a small mountain path of during emergency training (Ida Elementary School in Kuroshio town, Kochi prefecture)

* Translator's note: some names that appear in this article are pseudonyms.

高台避難訓練
うっせつと木々が茂る山道を小学生が懸命に駆け上る。疲れがはじまり始めた児童には先生が「つばをのけて」頑張れ、もう一息だ。山の中腹にたどり着くと、眼下には穏やかな太平洋が広がっていた。

高知県の黒潮町立伊田小学校では、今年4月以降、週に1回、校庭から隣接する裏山の中腹まで全力で駆け上がる避難訓練を行い、最後尾の児童がゴールしたタイムを記録してきた。1学期のベストタイムは4分16秒。地震発生から津波到達までの予想時刻は10分だが、「災害時は何が起ころかわからない」と2学期以降も時間短縮を目指す。

週1回の高台避難訓練を始めたきっかけは、今年3月の内閣府の検討会での発表だった。南海トラフの巨大地震が起きると、黒潮町は最大34・4メートルの津波に襲われる恐れがある。

同校の校舎は、路地を挟んで65メートルの太平洋が迫り、町内11校の小中学校の中で最も海に近い。しかも、標高は5・7メートルしかない。

東日本大震災後に避難訓練を年2回から3回に増やしたが、「これでは十分」と判断した前田浩文校長(5)が目をつけたのが、2年前から始業時間前に全校児童で取り組



教育ルネサンス

生き抜く力 1

No 1646

東日本大震災は、防災教育の重要性を浮き彫りにした。津波から逃れて無事だった。「想定外」の巨大地震が多く、こうした被災地での教訓をの命を奪った一方で、市内の全小中学校で津波防災教育に

逃げる大切さ指摘

東日本大震災は、防災教育の重要性を浮き彫りにした。津波から逃れて無事だった。「想定外」の巨大地震が多く、こうした被災地での教訓をの命を奪った一方で、市内の全小中学校で津波防災教育に



週1回の朝の避難訓練で子どもたちは懸命に山道を走る(7月5日、高知県黒潮町の町立伊田小学校)

内閣府の検討会 正式名は「南海トラフの巨大地震モデル検討会」。「想定外」が被害を拡大した東日本大震災の反省から、東海、東南海、南海地震などが同時発生する南海トラフの巨大地震について、科学的に考える最大震度と津波の高さを3月31日に公表した。それによると、震度7が予測される地域の面積が従来の約20倍に拡大、最大の津波高は太平洋沿岸の多くの地域で従来の想定の高さの約2～3倍に上り、高知県黒潮町の34・4メートルをはじめ、11都県90市町村で10メートル以上となる。

ただ、黒潮町でも34・4メートルの津波が押し寄せるのは一部地域。伊田小の周辺は20～30メートル程度。訓練のゴール地点にあたる裏山中腹の標高は33メートルで、最悪の事態を想定している。

防災教育「知徳体」得る

タイムは34秒も縮まった。毎朝、校庭を7・10周(700～1000メートル)は走る。そのうちの1日分を避難訓練に充てることにしたのだ。裏山の中腹までの道のりは険しい。訓練を始めた頃は、足を滑らせて転ぶこともあったが、今では滑りやすい箇所を避け、バランスを崩しても上手に体勢を立て直せるようになった。そして、3か月で

平洋に向かって全員で「ヤッホー」と呼びかけて終わる。自然を脅威に思っただけでなく、その美しさも体感してほしい——という先生たちの思いがそこには込められている。

町もハード面の整備を後押しして、2、3階のペランダから直援、裏山に登る避難路が2学期には完成する。各教科で防災を学ぶ試みも今年度から始めた。算数の授業で津波の速度を計算し、国語や社会で災害情報を読み取る力を養う。実践的知識と自衛の心構えを徹底させるのがその狙いだ。(小寺以作、写真も)



Ability to Survive 4

Teaching Materials: “The Miracle of Kamaishi”

“What do you do if you hear that a Tsunami is approaching ?” In a 3rd grade classroom at Koyo Junior High School, Shin-nomiya city, Wakayama prefecture, a lesson on prevention in case of disaster was held in the middle of July. When asked this question by Mr. Junichi TAKAHASHI, a teacher in charge of Health and Physical Education, the students answered, “I will evacuate to a higher place” or “I will try not to be in a hurry.”

If the Great Earthquake at the Nankai trough occurs, it is expected to kill up to 400,000 people. It is estimated that a 12.2 meters high Tsunami could reach Shin-nomiya city in less than 12 minutes after the earthquake. However, when Mr. TAKAHASHI showed the students the Tsunami flood hazard map, which shows to what extent a Tsunami would cover the town, some of them answered, “My house is far from the area that is expected to be flooded, so there is no problem.”

At Kamaishi city, which was heavily damaged by the 2011 Great East Japan Earthquake, a Tsunami flood hazard map already existed. However, the actual Tsunami was bigger than expected, and there were many casualties in residential areas which the map described as safe from a Tsunami. In explaining these incidents, Mr. TAKAHASHI told the students, “if you depend too much on assumption, it will be too late to evacuate”.

Mr. TAKAHASHI designed the lesson himself, based on the instruction manual for education in disaster prevention of Tsunami, and considering the shape of the school area. The most important purpose of the instruction is to understand the “Three Principles for Evacuation

during a Tsunami,” which has been advocated by Mr. Toshitaka KATADA, professor of Gunma University, who has led education in disaster prevention of Tsunami in Kamaishi city for a long time. One of the three principles is “Do not depend on assumptions.”

Koyo Junior High lies six meters above sea level. According to Mr. Masaaki SHIMADA, vice principal of Koyo Junior High School, “We believed that it would have been safe enough if we escaped to the 3rd floor or the roof of the school building in case of a tsunami.” However, after the Great East Japan Earthquake, they changed the plan of evacuation to the 90 meters high mountain behind the school.

Kamaishi city was heavily damaged by the 2011 Tsunami, but almost all 3,000 elementary and junior high school students managed to escape. This story is called “The Miracle of Kamaishi.” In particular, the students at Unosumai elementary school and Kamaishi Higashi junior high school in the area of Unosumai evacuated to a higher place than the designated evacuation area, encouraging each other, so that everyone in the school was able to survive. This story made people think about the significance of education in disaster prevention.

During the lesson at Koyo Junior High School, an animated program made by the Japan Metrological Agency was televised, showing the evacuation of the elementary and junior high school students in the area of Unosumai. The students also learned two other principles: “Do your best” and “Take the lead in evacuation.” They nodded in agreement when Mr. TAKAHASHI told them, “The first priority is to protect your own life.”

The boards of education in Gunma prefecture that plan lessons about disaster prevention of Tsunami have used this instruction more than two times this year for all students in elementary and junior high schools



Photo: Students check the location of their houses on the Tsunami flood hazard map. They learn the danger of depending on assumptions.

Learning from the Experience of Kamaishi across Japan

Traditional measures of prevention during disasters placed great importance on the preparation for how to survive after a disaster, such as management of a public shelter and of food stock. On the other hand, the “Three Principles for Evacuation during a Tsunami” that Mr. KATADA advocates, focus on “survival during a disaster” and not losing their lives.

The message “Let’s learn from the Miracle of Kamaishi” has spread all over Japan after the Great East Japan Earthquake. Supplementary reading and teaching materials that introduce the experience of Kamaishi have been made in Wakayama prefecture, Hyogo prefecture and Tokyo.

* Translator’s note: some names that appear in this article are pseudonyms.

「津波が襲ってくる」としたらどうする?。7月上旬に行われた和歌山県新宮市立光洋中学の3年生の授業。保健・体育担当の教諭(30)の問いかけに、生徒たちは少し首をかしげながらも「高いところへ逃げる」「焦らない」などと答えていった。最大40万人が犠牲になるという推定もある南海トラフ巨大地震が起きた場合、同市では最短12分で最大12・2メートルの津波が襲うと想定されている。しかし、どこまで津波が押し寄せるかを示した同市の津波浸水予想図を、教諭が示すと、「わが家は浸水域から遠いから大丈夫」といった声も生徒から漏れた。

東日本大震災

で、甚大な被害を受けた岩手県釜石市でも、浸水予想図は以前から作成されていた。し



No. 1649

教育ルネサンス 生き抜く力 4

教材は「釜石の奇跡」

か、実際の津波は予想図の想定をはるかに上回り、浸水しないと思われていた地域の住民の中からも多くの犠牲者が出たのだ。こうした事実を解説しながら、教諭は生徒に語りかけた。「想定にとらわれていると、逃げ遅れてしまうかもしれないよ」

授業は、和歌山県教委が昨年12月に作った「津波防災教育指導の手引き」を基に、校

津波浸水予想図で自宅の場所を確認する生徒。この後、想定にとられる危険性を学んだ(光洋中で)



取り組み 全国的に

避難所の運営や食料備蓄など、従来の災害対策は、災害を生き延びた後の準備に重点が置かれがちだった。これに対し、片田教授が提唱する「津波避難3原則」は、災害で命を落とさず「生き抜く」ことを最優先課題に掲げたのが特徴だ。

「釜石の奇跡に学ぼう」との声は震災後、全国に広がり、和歌山県のほか、兵庫県や東京都でも釜石での取り組みを紹介した副読本や教材などが作成されている。

定にとられるな」はその3原則のうちのひとつなのだ。標高6メートルにある光洋中では、これまでは津波が来ても校舎の3階か屋上なら大丈夫と考えていた(嶋田雅昭教頭)。しかし、震災後は、標高約90メートルの学校の裏山に逃げるように避難計画を変更した。津波で壊滅的な被害を受けた

た釜石市だが、市内の小中学生約3000人はほぼ全員が避難し、「釜石の奇跡」と言われている。特に、鶴住居地区の釜石東中と鶴住居小の子供たちが励まし合いながら定められた避難場所よりも高い場所に逃げ、学校にいた全員が生き抜いた事実が防災教育の意義を浮かび上がらせた。光洋中の授業では、鶴住居地区の小中学生の避難を再現した気象庁制作のアニメも放映。「最善を尽くせ」「率先して避難せよ」という避難3原則の残りの2原則についても学んだ。「何より自分の命を守ることを優先してほしい」と、教諭が言うと、生徒たちは大きくうなずいた。同県教委は今年度、県内全小中学校の児童、生徒にこの手引きを使った防災授業を2回以上実施する計画だ。(木村達矢 写真も)