Together, We Look Ahead to the Future, Think About It and Take Action: Learning About Sustainable Societies from Climate Change Study Exchanges with the War Memorial Primary School

Shishiori Elementary School, Kesennuma city

Teacher Kota Senda

Chief Administrator, Coordination Center of Miyagi University of Education, Kesennuma city Ryo Asano

<u>1</u> How were the impacts of climate change experienced in Japan where they normally go <u>unnoticed?</u>

- From fiscal 2018, cross-curriculum study activities among fifth and sixth year students have been promoted with regard to the connections and structures of oceans and the global environment, and the changes they are undergoing. Through specialized learning about the current status of climate change, its impact on daily life, and the causal relationship between the climate crisis and daily life, such as the connection between the westerlies and ocean currents all over the world, convection due to warm and cold currents, global warming caused by rising seawater temperatures, and the acceleration and intensification of climate disasters due to climate change including typhoons by Special Associate Professor Yoshihiro Niwa of the Tokyo University Center for Ocean Literacy and Education, Professor Toshio Suga of Tohoku University Faculty of Science, and Representative Director Kentaro Ono of the Japan-Kiribati Association, the children became aware that climate change is something relevant to them, and took on a sense of danger in that climate change is an issue for them personally.
- Another chance for the children to consider these things personally rather than as problems for others was provided by the shock caused by the major damage suffered by elementary schools in Omuta City in Fukuoka Prefecture in the flooding disaster in Kyushu in July last year. Exchanges about sakura cherry blossoms had been taking place with the schools, which had been receiving support ever since the earthquake.
- Due to the warming of the seas caused by climate change that is undoubtedly advancing all over the world, the city of Kesennuma, where the fisheries industry is one of the core industries, has been severely impacted. The pressing issue of the increasing impact on Kesennuma, which is a city that "lives together with the sea," has been felt in a very real way, including declining

catch quantities of mackerel and other fish in recent years, the change in the species being caught, and economic loss due to the increasing distance to fishing zones.

- There is a strong desire to understand deeply, study and take action with regard to the abundance and blessings of the sea, oceanic crises caused by climate change, and the connection between those impacts, the Kesennuma fisheries industry and economy and our own lives.
- The discussion by Representative Director Kentaro Ono about the current status and future of Kiribati further strengthened this awareness, and greater significance is being given to exchanges between UNESCO schools about this very real issue.

2 How were we able to perceive the causal relationship between climate change and our daily lives?

- The children had their attention drawn to the fact that the environment, irrigation and management of Shishiori River, which was studied in year four, and the advantages to our lives from the diverse biology of prospering water environments are in an increasingly critical situation due to the heavy rains, floods and landslide disasters accompanying recent climate change. They have understood that the impacts of climate change are starting to be felt, and that Kesennuma, which is blessed with a rich environment of forests, rivers and seas, is no exception.
- From direct interviews with people working in the fishing industry and with fishermen, the children started to understand the seriousness of the situation for the Kesennuma fisheries industry, which was studied in depth primarily in year five, because it is at risk of becoming unsustainable due to the impact of global warming.
- For the last three years, there has been an ongoing abnormal situation whereby the catch of "mackerel," which is the typical fish of the Kesennuma region where we live, has been disappearing. Mackerel, which had been sold and eaten without any thought until recently, is no longer readily available, which is impacting the "food" people need to survive. In Kesennuma, which is a city that "lives together with the sea," there are many people who work in commercial fishing and companies related to marine products, and the fisheries cluster sustains the town economy and people's lives. The decreasing catch due to the impact of climate change is not only causing the industry to stagnate but also it has a negative impact on various other aspects, such as the traditions and culture of Kesennuma, leading to progressively more serious issues, which the children have started to understand.

In the former Hakusan Elementary School that was merged with Shishiori Elementary School, a "Snow Games Festival" was regularly held every year by the children school-wide. This important event was handed down as a tradition but the lack of snow in recent years has made it difficult to hold the games. Due to the complete lack of snow two years ago, it was changed to the "Mid-Winter Games." The Snow Games were just barely implemented last year when there was a thin smattering of snow. The children were saddened by the fact that climate change has even impacted school events that they enjoy.

3 What countermeasures and actions are to be taken in order to mitigate climate change?

- Activities in connection to climate change are being taken up at Shishiori Elementary School in specific subjects and in general study, as well as club activities and voluntary activities conducted by the children. Starting two years ago, the entire school has been engaged in "reusable bag activities," and a "food waste movement" (a movement to eliminate food waste from school lunches).
- In an ongoing "small UNESCO" activity that was organized by current fifth year volunteer pupils when they were in Year 2 the children are actively having an impact in the local area by engaging in activities such as requesting local stores to use handmade bags made of recycled newspaper, and inviting friends to produce bags in different shapes for different purposes.
- The children from this small UNESCO have taken the lead in ongoing activities to involve other children in gathering fallen leaves from the sidewalks around the school, which are taken to a compost heap supplied by the school for use as mulch.
- One of the school-wide top-to-bottom group activities is a flower planting activity using flower beds on school grounds. The environment committee takes the lead in this activity that beautifies the environment, adds to the greenery, and helps to reduce CO2.
- Starting with the familiar topic of "food," the aim is to mitigate climate change by raising awareness of ethical production and consumption (ethics and 3Rs, etc.). Food is essential to human life, but it is also a blessing from nature that is being directly impacted by global warming. Fifth and sixth year students are tackling the SDGs in home economics using the familiar topic of the impact of climate change on "food," and the impact of our "food" on the global environment.
- In Year 6, activities are promoted on the themes of the "slow food movement," "local production for local consumption," and "food waste reduction." Kesennuma is the first city in

Japan to declare itself as a slow food city. Moving away from a lifestyle of consuming fast food that has a large carbon footprint, activities are underway to prioritize eating that has no waste by showing thanks for the foods grown in the area. All of the children in the entire school have this in mind in their activities. Consideration is also being given to including what is learned in "research activities about living together with the sea" and in school subjects, etc. in committee activities, for example. The school lunch and health committee has set "Paku Paku Weeks" to involve the entire school with the aim of eliminating food waste.

Plans for original lunch boxes with the themes of "local production for local consumption" and "food waste reduction" have been included in the curriculum. In remote lessons with instruction from Yamagiwa Hiromi who is engaged in food education in Aizuwakamatsu, the children gave thought to recipes that use swordfish, skipjack tuna and other fish that can be caught in Kesennuma. When visiting Aizu in December for a study trip, the original lunch boxes devised by the children will be eaten at lunch time.

4 What kind of support and activities were carried out with regard to the people and countries being impacted by climate change?

- This year, in an exchange with Kiribati with support from the Sendai UNESCO Association, we correctly understood the realities of the increasingly unsustainable situation for countries and people being affected by global warming, and we together considered what we can do to resolve this issue.
- Through exchanges with Representative Director Kentaro Ono and Kiribati (between the children and between teachers), we will cooperate to put into practice the things we can do, and the things that the region can continually carry out. The teachers themselves deepened their understanding of climate change based on the current situation in Kiribati, which will be used creatively to produce investigative curriculums and to provide pragmatic instruction (Fig.

1,2,3).



Fig. 1 Climate change lecture (Representative Director Kentaro Ono)



Fig. 2 Study training session among teachers

(Shishiori Elementary School, WMP School, Sendai UNESCO Association, Miyagi University of Education Coordination Center)



Fig. 3 An exchange with the younger students at War Memorial

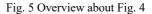
- All of the children will reduce waste in areas where change is needed not only in school activities but also in daily life.
- While we can act individually, with regard to initiatives that will not make an improvement on the part of the child alone, friends, relatives, local people and the region are being asked to join in.
- As a partner in creating the future, we are cooperating to take action.

The exchange between the two schools was featured in the government-run Uekera paper and the private Kiribati New Star paper published by the parent company of the company that manages and Kirbati's only TV channel (Fig. 4,5,6,7).

| | aki ae e a | Rengeronge | n Aonnaaba | |
|---|--|--|---|--|
| n ana Boto n Iango UNESCO | | | Ae e kimototo E na nakoia | |
| | | | | |
| ana botoniango te UNENCO ao e a kateaki rahwatan Sendai UNENCO Ao sociationi ana Sendai | i aon Taiban a tu So- cial Science iler e anaski Kiribati bearu katoretee i ann ka- kareakin ana ibao- | nakon Nobembwa te ririki asi. Ini subu te'katustan Iwaar tu waakinaki te recitaki rinanon te | Bon te kanntonings are e albunabunaki buna e na tei naba UNENCO Associa- tion i aon Kiribati bukin theutibunan | Estoration and Antonio State |
| Japan, n 1967, i mwanintnin Tahat n te UN n 1958, Sondai UNESCO | bucki Taban sakon'ar Aconzaña, kakan- nakin te octabuanin ao to SDGs. | intende i ann muale ao anene i marynaila bootaki i ann Kiribati ma Sendai i Tiaban n | ao katashangakan ana Boto ni lango UNESCO ngkai e | eb sei inun Kantaro Ono. ana takon Kolball Newster: Takon |
| Association, box to 15 Okitobwa, | A ibushuski Japan | moan te ritiki se e na Kiribati | tauraoi Sendui | - |



Fig. 4 Page13 of Kiribati New Star on October 15, 2021



Page13 of Kiribati New Star on October 15, 2021,

Exchanges in the Spirit of UNESCO

The United Nations Educational, Scientific and Cultural Organization is a UN agency established in 1945 after World War II to promote global education, the sciences, and culture. The UNESCO Charter states, "Since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed." In Kiribati, PIPA is registered as a World Heritage Site, and the activities of the executive office are being undertaken.

In order to proclaim the spirit of this UNESCO Charter on a private and grassroots level, in 1947, the first UNESCO Association was established in Sendai in Japan. This was some time before Japan became a member nation of the UN in 1957, and there are now almost 4000 UNESCO Associations and Clubs around the world.

Since last year, 2020, on the basis of this UNESCO spirit, the Sendai UNESCO Association has been publicizing the UNESCO spirit and carrying out private-level needs confirmation studies among the students and young people of Kiribati, investigating the potential for online exchanges between the two countries, and, in Japan, creating education programs in social studies for sixth year elementary school students with the theme of Kiribati regarding Japan's international contribution, environmental education, and the SDGs. The Japan-Kiribati Association and Tohoku Region ESD Activity Support Center are cooperating in this project.

In connection to this, on September 28, an online exchange was held between teachers from the War Memorial Primary School in Tarawa and Shishiori Elementary School in Kesennuma City in Japan. This exchange was implemented with cooperation from the Tohoku Region ESD Activity Support Center as a joint project between the Sendai UNESCO Association and Kesennuma City/Miyagi University of Education Coordination Center prior to the online exchange between children from the two schools scheduled for November this year. Also, in January of next year, an online exchange is scheduled regarding songs and dances from Kiribati and songs and dances from Japan.

There are great expectations about the establishment of a Kiribati UNESCO Association in the near future with the goal of propagating the spirit of UNESCO in Kiribati, and the Sendai UNESCO Association is providing all-out support in this regard.



Fig. 6 Page5 of Kiribati New Star on October 29, 2021



Fig. 7 Overview about Fig. 6

Kiribati New Star on October 29, 2021

First Exchanges by Zoom Between Elementary Schools in Kiribati and Japan (5 pages)

The War Memorial Primary School in Tawara is preparing to make an introduction about the culture and situation of Kiribati to Shishiori Elementary School in Miyagi, Japan. Vice Principal Rouata Tioiti from the school said that, after receiving the offer to hold an exchange in June this year, "the principal decided that it was of great benefit to the children and so we moved forward with the exchange. The reason why our school was given this direct offer from among the many elementary schools in Kiribati is that our school is one of the largest in terms of student numbers."

Vice Principal Rouata Tioiti also said, "First, a Zoom meeting will be held between teachers from the schools, and we were asked whether there are cultural festivals in Kiribati. At the point when this exchange by Zoom was held, the cultural festivals of other schools had already finished, but our school had not yet held its festival for scheduling reasons, so we decided to hold the festival on the same day as the Zoom meeting with Shishiori Elementary School." The Year 3 pupils are to make a presentation of Kiribati dancing to Shishiori Elementary School, while Year 3 pupils from Shishiori Elementary School will demonstrate their local culture, including dancing.

This is the first time in history that a Kiribati elementary school has held a remote exchange with a school from another country. All of the schools and parents and guardians greatly look forward to the successful preparation by the War Memorial Primary School of this online global transmission of Kiribati's dances and information about the country.

In this exchange, different themes have been established for each year, including "culture" for Year 3, "Water as the source of life" for Year 4, "Industry and trade" for Year 5 and "The future" for Year 6. Children will participate as representatives for each grade. According to an interview with Mr. Kentaro Ono, who is arranging the program, in the Kiribati Newstar, the online exchange will be held by Class 3 on November 12 from 11.45 to 12.45, by Class 4 on November 12 from 13.30 to 14.30, by Class 5 on November 19 from 11.45 to 12.45 and by Class 6 on November 19 from 13.30 to 14.30. The venue requires an internet connection and a stable power source, so the children from War Memorial Primary School will participate from the conference rooms in the social hall in Bikenibeu in Tobaraoi.

Exchanges between children from small countries such as Kiribati and large countries like Japan are very significant to the construction of world peace, and learning about each other's countries is truly wonderful from an educational perspective, and so this exchange between the War Memorial Elementary School, which is the largest in Kiribati, and Shishiori Elementary School was also covered on KiriOneTV, the only TV channel in Kiribati (Fig. 8,9).



Fig. 8 a scene from Kiri One TV



Fig. 9 Interview with vice principal Rouata Tioti