

Development of Ocean Education from the Perspectives of Climate Change, Disaster Preparedness and Disaster Mitigation in Mountainous Regions

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1 Holding a variety of lectures and finding keywords to raise awareness of global warming

- Based on a lecture by Mr. Kentaro Ono in September last year, the children learned that global warming is causing sea levels to rise and that Kiribati is already suffering actual damage. Also, we discussed many familiar things that cause global warming, which made us feel like we can make a change through our own actions.



Fig. 1a The Lecture by Kentaro Ono



Fig. 1b The Lecture by Kentaro Ono

- At the end of October, an ocean education study session was held as a remote conference by teachers from the Center for Ocean Literacy and Education in the Graduate School of Education at The University of Tokyo. Three of the teachers discussed the connection between Tadami and the sea, the connection between Tadami and snow, and the various issues causing global warming. This brought up keywords from various viewpoints that we were previously unaware of, such as “Tadami is a water cycle heritage,” and “Tadami is a canary for the environment.” Meanwhile, the children learned that global warming is causing abnormalities in the water cycle, and that one of the areas where those effects are striking is Tadami, or, in other words, that Tadami is at the forefront of global warming. The children realized that they are at the front lines when it comes to protecting their own hometown, as well as the region, Japan, and the whole world.



Fig. 2a The Lesson on Ocean Education(Online)

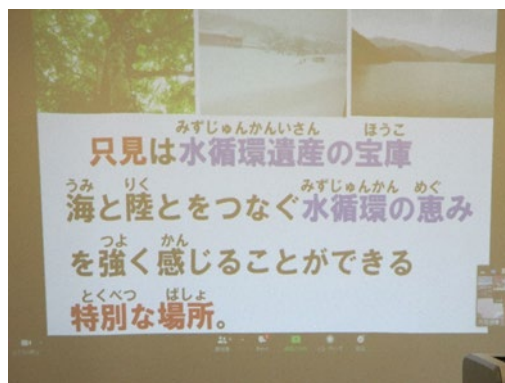


Fig. 2b One part of the Slide about the Lesson

- In connection to the “Environment Start Project,” JMA Fukushima Local Meteorological Observatory Investigator Hiroki Seino will be invited to give a lecture on September 8 of this year regarding “basic knowledge about global

warming, climate change in Fukushima Prefecture and Japan due to global warming, and what we can do about it.”
(Postponed due to the COVID-10 pandemic)

2 Centering on learning in general studies

- In the investigation of agriculture in Tadami by fifth year pupils, agricultural workers told them about the impact of climate change on crops. They investigated the impacts of global warming in various regions, not just in Tadami, which advanced the learning processes from “if global warming continues to cause abnormal weather like this, there will be huge impacts on agriculture in Tadami” to “In order to protect agriculture in Tadami, we have to prevent the cause, which is global warming” and, finally, “Let’s think about and disseminate what we can do to achieve that.”



Fig. 3a Learning from the Farmer



Fig. 3b Learning from the Farmer

- From the perspective of “the development of Tadami,” sixth year pupils investigated town issues. This led to an understanding of the 2011 flood damage and the increase in precipitation due to global warming that caused the flooding based on interviews with town hall officials. While learning about town policies to promote flood-control works in various areas so that the same kind of damage does not occur again on the one hand, the pupils also discussed the issue of the destruction of nature caused by simply promoting river management when considering the idea of protecting nature in UNESCO Ecoparks. In view of the fact that relying on river management is a defensive response, in terms of fundamental solutions, the conclusion was that it is important to make improvements to things that cause global warming in daily life, which was publicized externally.



Fig. 4 Interview surveys with the town hall worker



Fig. 5 The presentation