A Study on the Effect of Education for Disaster Prevention using Science and Technology

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The East Japan great earthquake disaster that occurred in 2011 has had a big influence on us. The insufficiency of attention to disaster prevention measures is among the most pressing ones to achieve the safety and security society. Therefore, this research focused on an instructional activity to improve the awareness of the disaster prevention as a part of Inter-Graduate School Doctoral Degree Program on Science for global safety. Through this instructional activity, we intended to acquire interdisciplinary viewpoints, which are an essential ability to consider disaster prevention.

In this research, several styles of disaster prevention education were carried out by members whose specialized fields are different each other. In 2016 year, we performed four events: (1) a support to research projects of Furukawa Reimei high school students, (2) the Science Day "G-Safety mini-lecture, Tohoku University students teach global safety!", (3) Suzuki technical high school class and practical lecture, and (4) combination activity with the Program for Leading Graduate Schools of Kochi Prefectural College, “DNGL”. First, in the research plan meeting for Furukawa Reimei high school, G-Safety students gave the high school students some advices about their research projects for advancing their studies as a part of the disaster prevention education. Second, on the Science Day, we gave several lectures on science and technology to participants of the event, who were from children to adults. Third, in Kochi Prefectural Suzuki technical high school, we lectured on the present conditions and problems of providing disaster and emergency information to residents at the time of East Japan great earthquake disaster. Finally, in Kochi Prefectural College, we understood the disaster correspondence judging from medical viewpoints and had an interdisciplinary discussion about disaster prevention with Inter-Graduate School Doctoral Degree Program students by exchanging opinions from viewpoints of engineering and disaster nursing science.

In each activity, participants deeply understood that technologies are useful for disaster prevention and that using the technologies appropriately is important. After the lecture at the Kochi Prefectural Suzuki technical high school, some high school students commented that their consciousness for the Nankai trough earthquake, which is expected to occur in near future, was improved. Our activities were good opportunities for public people to learn past disasters and consider effective measures when disasters happen. Therefore, this study contributed to improving consciousness for disaster prevention.

Keywords: Education for Disaster Prevention, Science and Technology