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How do Japanese escape from TSUNAMI? - Disaster Prevention Education through using Hazard Maps

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After the disaster of the earthquake and tsunami in Tohoku, Japan in 2011, it is necessary to teach more “Disaster Prevention” in school. The government guideline for education of high school geography students emphasizes improving students’ awareness of disaster prevention through acquiring geographical skills, for example reading hazard and thematic maps.

The working group of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) says that the purpose of Disaster Prevention Education is to develop the following competencies:
1. To acquire knowledge about disasters in the local area and the science of disaster prevention.
2. To teach individuals to protect themselves from natural hazards.
3. To safely support other people in the local area.
4. To build a safe society during rebuilding from the disasters.

“Disaster Prevention Education” is part of the “Education for Sustainable Development” (ESD) curriculum. That is, teaching disaster prevention can contribute to developing abilities for sustainable development and building a sustainable society.

I have tried to develop a high school geography class about “tsunami”. The aim of this class is to develop the students’ competencies to acquire the knowledge about tsunami and protect themselves from it through reading a hazard map. I especially think that in geography class, students can protect themselves from disasters through learning the risks of disasters and how to escape when disasters occur.

In the first part of class, I have taught the mechanism of tsunami formation and where tsunamis occur in Japan. In the second part of class, I have shown students pictures that I had taken in Tohoku, for instance Ishinomaki-City, Minamisanriku-Town, Kesen’numa-City, and taught how to read hazard maps that show where safe and dangerous places are when natural hazards occur. I think that students can understand the features of the local area and how to escape from disasters that may occur in local area by learning a hazard map.

I have used a comment paper to evaluate the following competencies:
1. Students can understand the mechanism of tsunami formation and its potential for damage.
2. Students can read the hazard map.
3. Students can explain or describe a detailed plan for disaster prevention.

In conclusion, many students could read hazard maps and describe a detailed plan for disaster prevention. In other words, through developing mapping skills, geography students can contribute to developing abilities for Disaster Prevention Education and building a sustainable society.

Disaster Prevention Education has many requirements. For example, the MEXT working group says that Disaster Prevention Education teaching should not only deliver knowledge but also develop students’ problem solving competency, and that it is important to incorporate this education within each subject area in the school.