

Possible disaster preparedness course at the classrooms in junior and senior high schools in Okinawa Prefecture

MATSUMOTO, Takeshi^{1*}

¹Faculty of Science, University of the Ryukyus

Okinawa Prefecture located in the south-westernmost part of Japanese Islands and in the subtropical area is often attacked by devastating natural disasters which are different from those in the other areas in Japan islands, such as, destructive typhoons and their subsequent flooding due to high tides, many earthquakes of both plate convergent type and due to active across-arc fault slip, which may induce tsunamis because their hypo-centres are mostly sub-seafloor.

Disaster preparedness, especially in Okinawa Prefecture is to be taught at the school education. Currently, 'Home Economics' is the only subject in which disaster preparedness is taught in junior and senior high schools in Japan. Recent subject for high schools 'Basic Earth Science' includes also disaster prevention against devastating earthquakes, tsunamis, volcanic activities, etc. Disaster preparedness education should include these two factors (Home Economics and Earth Science).

Japanese government established the system of renewing educational personnel certificates in 2007 and mandated the adoption of it in April 2009. Since 2012, the author has offered a 6-hour educational personnel certificate renewal course titled by 'Disaster preparedness in Okinawa - practicing development of teaching materials for school pupils'. This course is targeted mainly for science and home economics teachers of junior and senior high schools in Okinawa Prefecture, to tell the school pupils how to save their lives in case of devastated natural disasters.

Considering the teaching materials made during the 2014 course, the author would like to propose the following new curriculum through active learning for disaster preparedness 1-day course in the classroom.

1. Lecture: About natural disasters in the tropical area - earthquakes, tsunamis, tropical storms, etc.
2. Hands-on learning: How to evacuate in case of tsunamis - find the most appropriate evacuation route from your school by use of the maps and geographical information.
3. Field work: Practicing the evacuation that you proposed in the previous learning.
4. Reflection of the field work.
5. Hands-on learning: Preparedness for natural disasters - measure for safety.
6. Hands-on learning: Preparedness for natural disasters - social work, Preparation for presentation.
7. Presentation.

Keywords: Disaster preparedness education, Sub-tropical, Earthquake, Tsunami, Tropical storm