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Geography and disaster prevention teaching in Kanai area learnt from the Great East Japan Earthquake's lesson

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Massive earthquake and tsunami on May11,2011, triggered nuclear power plant accident in East Japan, left a strong imprint on students' mind. In the flood of the copious information, teachers bear responsibility in educating students to bring up the ability to grasp the damage precisely. Moreover, it is also important that students contribute to society in the process of rehabilitation with proper prevention and energy-saving consciousness. It is an urgent and essential matter, however, there is a big gap between Kansai area and East Japan about the preparedness to earthquake/aftershocks and the student's power-saving awareness.

This report is aimed to discuss their awareness gap as premise, and to propose the significance of teaching earthquake-related geography and materials for learning incooperation with two secondary school teachers, KOIZUMI Kunihiko, Kami-koshien Junior High School, and SHIMOMURA Katsuhiko, Tsuna Senior High School, Hyogo Prefecture. Both had experienced the Great Hanshin-Awaji Earthquake in 1995 as teachers.

Three Case studies conducted are in the followings.

[1] Class practice (3hr) of 2nd year at junior high school, "atural disasters in Japan"

1) Know the situation of the Great Hanshin-Awaji Earthquake using video.

Check the damage of earthquake tremors and learn about the situation of earthquake disaster reconstruction and shelter life.

2) Learn about the Great East Japan Earthquake

Learn about earthquake damage from the point of plate-tectonic theory.Review tsunami and the damage in Tohoku area on Pacific Ocean.

3) Learn people's response to earthquake and tsunami

A teacher instructs students to think about the emergent action in the region where they live by using "Hazard Map in Nishinomiya City". How to protect oneself from the earthquake or what about the tsunami forecast and judgment are essential matters for students.

These practices are aimed to remind the students from taking advantage of school districts and city field excursion. However, students understand tsunami through only images, so that students are easy to fade memory and disaster prevention consciousness.

[2] Class practice (4hr) of 2nd year at high school, "geography A"

1) Understand East Japan Earthquake

Explain the distribution of tsunami and earthquake damage and its extent by using photos, Google Earth or information obtained from junior high school teachers in Ishinomaki City.

2) Understand the situation of the Great Hanshin-Awaji Earthquake

Awaji Island was seriously hit by the earthquake, but the memory has been forgotten by residents. In this connection, we showd the damage of school district by using statistics, thus, in the end we induce students to the total damage in Awaji City.

3) Learn about tsunami disaster

Extending the plate tectonic theory in the textbook, we explain them the plate-type earthquake and its cycle occurred by huge tsunami.

4) Response to tsunami disaster

Using "Disaster Prevention Map in Awaji City", the teacher organizes students' discussion in the class room about where we refuge and how we manage the refuge area. Then, the teacher instructs their role during the hazard and suggest the present limitation and problem that tsunami level was estimated below 2.5m to them .

[3] Class practice (90 minutes) at university "Introduction to human geography"

Despite this earthquake and tsunami were expected off Sanriku coastal area, why was the result of "unexpected"? In human geographical aspect, the idea of disaster reduction can more contribute to us.

In summary, our mission as teachers is to continue to narrate the disaster memory, and to suggest students that they should learn the disaster prevention or minimization to support and contribute to the affected areas or people. The most important point is that student learn the disaster knowledge on its history, present condition and mesures through field studies/woks by themselves with feet firmly fitted attitude by osmosis. Mental care to them is also essential.

Keywords: Great East Japan Earthquake, geography teaching, disaester prevention teaching, Kansai area