

## Earthquake and seismology on TV programs of commercial broadcasting and earth science education

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In recent years, great earthquakes have occurred and many people have suffered severe damage in Asia. In Japan, earthquakes around Tokai, Nankai and Tonankai regions are expected in near future. Therefore, officials and civilians are undertaking precautionary measures. In this age, TV programs about earthquakes are broadcasted more than ever before. I suppose that the contents of TV programs appear to a growing popular interest of earthquakes. Here I will analyze fourteen TV programs that deal with earthquakes on commercial broadcasting from July 1995 to January 2006. The contents are scrutinized to suggest ways of improving earth science education.

For sure, many people will have a greater fear of earthquake after watching these programs. But these programs play the important role of disseminating information. They give us information on earthquakes and seismology with pictures, experiments, simulations and opinions of experts. My study examines how earthquakes and seismology are taught in high school level Geoscience. I set some key words, such as seismic wave and motion, crustal deformation, mechanisms of seismic generation, distribution of seismic source, earthquake disaster and earthquake prediction to compare the contents of TV program and high school textbooks. And I can say the followings on the comparison. (1) In schoolbooks, they teach mainly seismic grounding to students with some cases of earthquakes. (2) On TV program, they give us detailed information about prediction and disaster. The prediction includes precursive phenomena.

In conclusion, the followings are some ideas that I suggest to earth science education. (1) The seismic groundings, such as seismic wave, motion and mechanism of seismic generation are necessary to understand the Geoscience of earthquakes. (2) Earthquake disaster and prevention should be taught as one of the seismic groundings. (3) There is some room to consider earthquake prediction and precursor, but it is most effective to instill the scientific sense that precaution and precursor are only reached through experiments and discussion. (4) We have to investigate teaching materials of seismology that strive to explain the real circumstances of each area.