



History and Challenges of Soil Education in Japanese Primary School based on the Government's Guidelines

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The latest Guidelines (called “Courses of Study”) for primary school education by the Ministry of Education (MEXT) of Japan, which will be in act from April 2018, contains a new sub-chapter referring to soil titled “the fate of rain water and the state of the ground” in the subject of Natural Science for 4th grade’s students. This new sub-chapter is apparently conscious with natural hazard, showing how the water seeps into the ground in relation to the different sizes of soil grains.

Historically, frequency of the word “soil” in MEXT’s Guidelines has been decreasing since its first draft of 1947. In 1998, a sub-chapter titled “observing earth surface including soils and rocks” was deleted, and the students lost a chance of learning soil as a natural body of earth in primary school. Furthermore, it stated that soil is not a factor of germination and growth of plants, which is not quite correct. Despite a series of revisions, until today there is still almost no focus on soil in the Guidelines.

Fearing such striking situation, the Japanese Society of Soil Science and Plant Nutrition (JSSSPN) through the ‘Committee for Soil Education’ is putting effort on the dissemination of soil education. Publishing manuals on soil observation and proposal of teaching methods, organizing events and programs including scientific experiments for students and teachers, and continuous awareness creation, are part of such efforts. In addition, JSSSPN presented an official request for inclusion of soil education to MEXT in 2016, making use of enhanced awareness on soils created by “International Year of Soil 2015”.

Above efforts resulted in deletion of the erroneous annotation of the Guidelines in its revised version of 2008, as well as inclusion of a new sub-chapter referring to soil in the newest version of 2018. JSSSPN has drafted a proposal of guidance for this sub-chapter, hoping school text publisher, local education committee and teacher could refer to this guidance. This guidance includes method of experiment to compare seepage of water in relation to different soil materials, with suggestion to consider soil aggregates as further study.

In the presentation, MEXT’s Guidelines for primary school will be reviewed, and ideal way of soil education in school will be discussed.