

Student science continuation study on rocks and minerals weathering experiment 2

KOMORI, Nobuo^{1*}

¹Kamata ota ward junior high school

I have been instructing the continuation study to check rocks and minerals change experimentally as a student study of junior high school science club for 23 years. In this continuation study, I have valued the study of the change basalt and fayalite with ultraviolet rays and the water most. This study is for a purpose to clarify one of the causes with much iron oxide on Mars. Therefore, students irradiate ultraviolet rays to the basalts and fayalites soaked into purified water and check their change. There is much basalt and fayalites on Mars probably. In addition, it is estimated that water existed on past Mars. Therefore, in past Mars, it is thought that ultraviolet rays and water were one of the factors to change rocks .

At first I am interested in the study and I decide directionality and the plan of the study of science club and prepares for tools. And the student who was interested in the study joins the scientific club and studies it. In other words it is a teacher-led science continuation study, but values the idea and opinion of the students. In a junior high school and the elementary school science, I think that such a teacher-led science study should be carried out more lively in Japan. And I think that it is easy to practice such a teacher-led science continuation study in the field of earth planet science and the field of biological science in particular.

Keywords: student study, ultraviolet rays, water, fayalite, basalt, change

Planning and practice of our delivery lecture at Betsukai elementary school

NANAYAMA, Futoshi^{1*} ; SHIGENO, Kiyoyuki² ; NAKAYAMA, Riku³ ; TSUJI, Takafumi³ ; SATO, Shin³ ; IKEDA, Yasuo³

¹Geological Survey of Japan, AIST, ²Meiji Consultants Ltd., ³Kushiro Branch, Hokkaido University of Education

Triggered by the Tohoku Earthquake on March 11, 2011, science education for disaster prevention and mitigation, are reviewed the importance of earth science education, especially in the field of education. However, we hear often from teachers in elementary school, junior high, and high school. "There are no instructional materials about local geology and geomorphology on the science textbook around here.

Kazuto Ishiwata in Betsukai museum was consulted me about "In the study period, which is expected to occur in November, I want you to plan visiting lectures about local geology for target 13 people in grade 5 and 6 of Betsukai elementary school ". At that time, it was to be three students from Hokkaido University of Education, Kushiro branch aimed at teachers in future come in field training associated with Prof. Yasuo Ikeda. Therefore, we plan to conduct a special science class with them in Betsukai elementary school in last November. We will report our planning delivery lecture at Betsukai elementary school about "Let's examine the origin of land using by geological and geomorphological information!" and responses from students.

Keywords: Betsukai elementary school, delivery lecture, geomorphology and geology, origin of land, eastern Hokkaido, marsh