

Shimazu's textbook in earth science for high school students, and reorganization of earth science(Chigaku)

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(1) Shimazu Yasuo and his philosophy "seamless earth"

The department of earth science at Nagoya University was founded in 1949. The feature of the department was coexistence of the laboratory of geology and that of geophysics and geochemistry.

Shimazu, who was 27 years old then, started his career as an assistant professor at geophysics laboratory in 1953. He came to Nagoya because of the name of the department of earth science.

He thought the earth is like a textile without any stitch (seamless earth),and he set his goal called "SMLES" and it became the guidelines for his research group.

(2) Shimazu Yasuo's textbook in earth science for high school students (Chigaku I)

Shimazu wrote the textbook in the 1970s. His textbook is based on the spirits of "SMLES."

The textbook differs not only from the traditional ones but also the ones in his days. As features, it uses many physical methods and also introduces some chemical approaches. The theory of plate tectonics (the continental drift theory), which is still new at the time, is included, and the textbook does not mention the concept of geosyncline.

(3) Earth science at Azabu High School

I graduated from the department of earth science at Nagoya University in 1973 and soon became a science teacher at Azabu High School.

As I was the first "earth science" teacher at Azabu, I could choose textbooks freely. I chose Shimazu's textbook for high school students because I, as a graduate of Nagoya University, was familiar with it.

It seems that Shimazu's textbook was not used very much in the whole Japan. Because it got out of print in the 1980s, I came to teach without using a textbook.

I have tried to teach all the fields evenly, and Shimazu's textbook has been very helpful for me. The contents of my website, and also two books which I wrote, are based on my lessons at Azabu High School.

(4) My vision for the future

Now, earth science (Chigaku) at high school is regarded as a "endangered species." I think the leading cause is that the contents and the goals of this subject have not been understood by the student and even by the teachers.

To be more popular, earth science must answer directly the universal question, "Who are we?", explain the structures of the universe, the earth, the substances and life, and elucidate the history of the universe and humankind. In addition, especially in Japan, we must think about natural disasters in the subject of earth science.

We may also have to think about changing the name of "earth science" and training teachers of "the subject." It will lead us to reconsider not only the goals of earth science but also those of natural science and secondary education.

References:

SMLES charter

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