

Motivation of Science selection from Earth Science approach-The effect of Science class Wonder of the Jewel-

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[Purpose of research] In Ehime University, [Women future development Center] was founded in 2010. The first event of Science course selection support project for high school girls in Ehime University was held in 2011, which I myself joined. And because of this event, I decided to apply to science course in Ehime University. After I entered Ehime University Super Science Course (SSC), I joined [Science Himeko (female students)] project. From these experiences, I started research and investigation on when and how the girls motivation for science course selection is made up.

[Introduction] Based on various environment and education, the situation to motivate to take science course differs. In my case, the first circumstance to be interested in science was one-year Science Education Center (SEC) when I was 5th grade of primary school. In SEC, I participated workshop in Misaki Coast, had observation of insects and plants etc. accompanied by science teachers in the same ward. In high school, I had many chances to join field training at Coasts and Forests, and astronomical observation. These experiences strengthened my mind to choose science course. In general cases, what could be the major factors for girls to be motivated to select science courses? I assumed three points: 1) [Information] about natural science, 2) [Environment] as experiences in childhood and parent cooperation, 3) [Media] as tools to make the communication easier. Based on these assumptions, I conducted three times of Science classes for girls and parents. I selected earth science topics that are relatively minor in school curriculum, had a lecture on Ehime related minerals and let them make jewelry art.

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[Process of research]

1. To draw attention to the earth science, minerals were referred to as accessories for example.
2. We set the class in a holiday, and made it subject to parent and child participation, so that the art would be made cooperatively and can be brought home. The materials of the art were crystal, pearl etc.
3. In advertising posters, jewels and image characters were painted with pastel colors, so that younger children could feel familiarly.

[Results] In every class, both younger children and parents concentrated on the lectures of minerals, and many questions were asked. When making paperweights, children and parents are both interested in choosing stones. This was true even for the fathers. Questionnaires were collected from 31 pairs of them.

Part of the results: Parents enjoying science classes with their children: 73%

Many children are interested in sciences however they do not strongly wish to get scientific jobs: 29%. Other responses: Teacher/Designer 10%, patissier 6%, Not Clear 55%.

[Reflections]

Fliers had been distributed in many places where children gather, however the majority of guest families had got the information from Ehime University web-site or related events. From this fact, it is inferred unless parents are interested in science their children are not given the chances of joining outside studying.

Minerals attract not only children but also parents.

Because children tend to like TV stars, celebrated female scientists should exist.

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