

## The role of the teacher in ordinary high school who worked in SSH high school

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### 1.Introduction

I worked in Hyogo Prefectural Kakogawa Higashi High School that is SSH designated school, during 10 years until 2013 fiscal year. I focused on geoscience education and offered the earth science course regardless of the humanities and science. The Earth Science Club I was teaching got first prize in the Geological Society of Japan and the Physical Society of Japan. In addition, the Earth Science Club got many high reputations, including the Minister of Education, Culture, Sports Award. The guidance of me was also evaluated, and I was awarded the like of Education, Culture, Sports, Science Minister excellent faculty awards, Noyori science Award, Physical Society Lifetime Achievement Award, and Kanagawa University Excellence Leadership Award.

I transferred to this year Prefectural Nishiwaki Senior High School, became the adviser of Earth Science Club and Biological Club. I was entrusted with the activation of the entire science education including the students of the science education course.

I think every day, what is the role being sought in myself, and if there is any way to fulfill it in annual budget of about one twentieth of SSH schools. What is required for teachers who experienced the SSH high school? Between I has been working in SSH high school, I had teachers consciousness noticed that easy to change imperceptibly from "implementation of the research and development of high-level science and mathematics education" that is philosophy of installation of SSH high schools, to "studies that cannot be only in SSH schools". Activities of SSH that are carried out with a lot of taxes, have tried the competence of its budget enforce teacher. The study theme of me while working in SSH high school was how to can be study originality and priority researches, and how to grow the imaginations without using a special analysis device. The experience, knowledge and personal connections obtained in SSH high school, has been utilized in the current working school.

### 2.Current specific educational activities of

Nishiwaki Senior High School located in the mountainous region of the south area of Hyogo Prefecture. The school consists of infantry 7 classes and an information science 1 class per grade, and about 70 students go onto the National University. Students are laid-back and very serious. Students are timid for a challenge to new things for inexperienced.

I was appointed to this school, and I established the Earth Science Club at the same time. About 30 students participated in the studies. They study actively on the theme full of originality. I am realizing that the students had been craving a stimulus. They think by hypothesis deductive method and announce the results in the research papers and posters.

I am teaching students by take advantage of experiences and knowledges and personal connections of SSH high school. And I take advantage of the research methods that do not use special analysis equipment. The students join many tournaments that the cost is not take because school budget is small. The Earth Science Club has already played nationwide top finishers, in just half a year for the first time research. The Students are studying in two themes now. (1) clarify the formation process of southern Hyogo Prefecture, (2) the estimate of movement of the ground based on the cracks around the manholes, and the recommendations of the maintenance standards of ground. I am involved in the agency cooperation project that connect the citizens and scientists with a focus on Kobe University as a core member.

Keywords: SSH high school, geoscience education, Earth Science Club, hypothesis deductive method, special analysis equipment