SPP , Volcano Fuji ; Volcanic activity and Disaster Prevention;

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Our school held the Invited Researcher's Lecture as part of MEXT's Science Partnership Program (SPP) for three consecutive years from 2003 to 2005. We report here the outcome of 2005, the final year of our three-year efforts, together with our results and problems through the practice of this program.

In 2005, we tried hosting joint workshops in cooperation with other four schools to avoid the problems we had in the first two years: 1) the limitation of the number of student participants, and 2) the number of public high schools in Tokyo to participate in SPP remaining low.

Being the research subject for several schools, the area of investigation should be fairly large, with enough impact to attract students' attention, and also with the availability of lecturers. Thus, getting some idea from the 4th Schoolchildren's Summer Course in Seismology and Volcanology, Secrets of the active volcano Fuji, which one of the authors (AN) was personally involved in, we restructured the program to be suitable for high school students. The theme chosen was 'Volcano Fuji Volcanic Activity and Disaster Prevention.' The workshop was conducted by five schools as a seven-workshop series altogether.

Results:

1) Students showed great interest in field work and experiments and participated in a high level research eagerly.

2) The course provided them with a good opportunity to know the advanced technology pursued in research institutes, and researchers' actual activities.

3) Guidance by university and graduate students as teaching assistants was very effective.

4) Presentation made in front of a large audience on the campus was a big incentive.

5) Discussion between lecturers and teachers was fruitful in setting up a suitable subject for high school students.

6) High school teachers themselves enjoyed this good opportunity to brush up their knowledge.

7) Know-how and experience gained through SPP could be applied both in high schools and in universities and research institutes.

Problems:

1) The increased number of schools, teachers, lecturers, teaching assistants caused some difficulty in communication and schedule arrangement.

2) To enrich the program, we had to hold many workshops, thus prolonging the period.

3) Field work sites were rather far.

Conclusion:

Science Partnership Program (SPP), after a four-year trial, enters a regular operation phase in 2006, as Science Partnership Project (SPP), now under the charge of Japan Science and Technology Agency or JST. Now the frameworks are defined clearly, including the categorization of the institution in charge and budgets, specifying the maximum budget allotted for a high school to make a project. It is now thus necessary to incorporate this program into each school's annual curriculum and continue to endeavor persistently.

It can be said that, in order to give good lectures, high school teachers are required, as much as researchers in universities and institutions to prepare voluntarily the lessons with a broader view, beyond the limit of each school's budget, procuring grants and human resources by making the effective use of SPP and other similar programs.

For those projects organized by boards of education, universities and research institutes, the amount of grants are substantially increased, enabling us to purchase necessary equipments as well. Both high schools and universities/research institutes should make an active approach interactively through SPP, and build a cooperative system to promote the further understanding of Earth and Planetary Science.