

Status and possibilities of Teaching Assistants of practical training in earth science subject in secondary education

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The educational effect and problems of Teaching Assistants (TAs) in practical training in earth science subject in the coordination of university, research institute and high school are pointed out as follows,

[Effect on the education]

Effect on the high school students:

(1)TAs can instruct students with fresh enthusiasm and interests of the science by same view point and value, because TAs same generation of the students.

(2)Students can get the opportunity to compare their future image and present situations of TAs. Various research subjects and results of TAs can be a help to their consideration.

Effect on the TAs and the faculties:

(1)Such works by TA and the faculty offer a good chance of feeding back research results to the society.

(2)Collegiality and horizontal relationships can be developed when TAs were posted from several universities.

(3)New knowledge and dedicated teaching of TA stimulates the teachers.

[Problems and solutions]

(1)There are individual differences of teaching skills and sense of responsibility within TAs.

(2)Accumulation of the teaching skill and its succession to younger parsons are difficult, because of mostly posted term of TA is a few years.

(3)There is a gap in perception between TAs and faculties regarding responsibility of TA in practical training.

Above mentioned points are frequently recognized in TA system in universities. Hence, some degree of resolution have achieved using the guide paper about teaching skill, ground rule and responsibility of TA, and keeping the before and follow meeting.

[Possibility of posting the TA in earth science subject in the high school education]

The statistic survey, based on a questionnaire for high school students showed that most of the new students, who were interested in the humanities course, had hoped to advance a specific discipline, and in fact they chose the same discipline in the second and third grade. At the same time, most of the new students who were interested in the sciences course, had obscure future plan, and then considerable number of students changed to humanities course (T. Takemura, personal communication). It can be attributed to lack of the chance to translate obscure vision into reality and to create interest during the high school curriculum. One of the effective measures to improve current situation is providing valuable field excursion and laboratory experiment. Furthermore, based on above mentioned two effects in -effect on the high school students-, effective cooperation by TAs in more than ever before bring out the obvious motivation from potential interest in the high school students. This will be one of the educational measures under the adverse circumstances for tendency toward the science unwilling.

[Future subject]

First of all, providing the opportunities of field excursion and laboratory experiment in earth science subject in the high school education are required to promote the effective utilization of TAs at secondary education. It is hoped that the idea and its realization such as counting the experience of TA as the course of university, and manage to raise money from new coordination between the secondary educational institutions and higher education, associated societies, and various grants.