

## Analysis on the effectiveness of gifted education by studying perceptions of science gifted education recipients

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The necessity of science gifted education is persistently emphasized in the aspect of developing individuals' potential abilities and enhancing national competitiveness. In the case of Korea, gifted education has been conducted on a national level ever since the country established legal and institutional strategies for gifted education in 2000. Even though 15 years has passed since a full-scale implementation of gifted education has started, there are few researches on the effectiveness of gifted education. Therefore, considering the splashdown effect, that a long period of time is needed to obtain reliable assessments on education effectiveness, this research surveyed gifted education recipients to study the effectiveness of gifted education. For this cause, we developed an questionnaire and conducted a survey of university students who had experience of receiving science gifted education. We deduced the following from the analysis. First, generally the recipients were satisfied with their gifted education experiences, but thought that not enough opportunities were provided on problem solving ability enhancement and career related aspects. Second, schools considered 'experiments' as the most effective teaching method, regardless to the stage of education. In addition, they perceived 'discussions and presentations' as effective education methods for elementary school students; 'theme investigating classes' for middle school students; and lectures for high school students. It could be seen that various experiences were held important for elementary school students and as students went into high school education, more emphasis was placed on the importance of understanding mathematical and scientific facts. Third, on gifted education teaching staffs, satisfaction of professionalism on specialities were high but satisfaction of variety of teaching methods were relatively low. In this research, to encourage science gifted students to meet their potentials, we propose the following: a variety of gifted education programs which could not be provided in regular curriculums, expansion in career education programs on finding careers in science technology, and the necessity of teacher training to enhance gifted education teaching method professionalism.

Keywords : [U+3000] science gifted education, recipients, effectiveness of education, education program, teaching method, teacher professionalism