



GIFTED STUDENTS' SELF- EFFICACY OF EDUCATIONAL TECHNOLOGY FOR TECHNOLOGY AND DESIGN

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Abstract

The main purpose of this study is to determine the gifted students' self-efficacy of educational technology for technology and design. It is also aimed to find out whether there is a statistically significant difference in terms of the gender, the special talent area, the type of school, the grade level, the education level and income rate of families, and the preference of using information and communication technologies. In this study quantitative method was preferred and descriptive screening model was used since it was aimed to determine the students' self-efficacy. The research was conducted with 1.376 pupils who were students in twelve Science and Art Centers in different regions of Turkey. As a data collection tool, *The Self-Efficacy of Educational Technologies for Technology and Design Scale* developed by Author (2019) was used. The scale was prepared in 5-point Likert type and consisted of 4 sub-factors with 20 items. It was found that the four-factor structure explained 52.45% of the total variance for the concept to be measured. Cronbach's Alpha internal consistency coefficient value of the scale was $\alpha = 0.89$. According to the Confirmatory Factor Analysis (CFA) results, the items of the scale were grouped under the title of sub-factors as *Technology and Design, Problem Solving, Appropriate Tool Selection and the Use of Technology*. The scale was found to be highly compatible in terms of current compliance values. According to the results of the research, it was found that the gifted students' self-efficacy of educational technology for technology and design was at *Good* ($\bar{x}=3.86 / \bar{x}=77.26$). In addition, while there was no significant difference in terms of the gifted students' self-efficacy of educational technologies for technology and design according to the gender variable, statistically significant difference was found according to the special talent area, the type of school, the grade level, the education level and income rate of their families, and the preference of using information and communication technologies. According to the results of the research, it is observed that gifted students were at *Good* level in terms of the results of the sub factors *the Use of Technology, the Problem Solving Skills and the Appropriate Tool Selection and the Technology and Design*. By the way it can be said that the individualized education program and individual talent recognition program that special talented individuals follow in Science and Art Centers generally meet the efficiency gains.

Keywords: Gifted Students, Technology and Design, Educational Technologies, Self-Efficacy.