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## **DEVELOPING ICT COMPETENCIES OF STUDENTS WHO ARE GIFTED IN MATH AND SCIENCE**

### **Abstract:**

ICT education or Software education should not be the activities only for students who have special interests or talents in information and technology areas, but general education for developing essential competencies of all students who have to survive 21st century. The necessity of ICT education is more than true in educating gifted students that will have to generate the solutions to let human beings survive this gloomy century.

The purpose of our research was developing the curriculum and teaching materials that can be utilized for developing ICT Competencies of Students who are gifted in Math and Science. This research intended to restructure the current educational programs for gifted students so that students can develop their ICT competencies as they go through gifted education programs without allotting extra class hours for ICT education.

To fulfill the purpose of this research, the following procedures were carried out: (1) we defined the ICT competencies that are required to students who are gifted in math and science, (2) we generated the strategies for ICT curriculum development that will be used for gifted students, (3) we selected the educational themes that ICT aspects will be applied to, (4) we developed the educational programs in selected themes based on the preset strategies, (5) we modified educational programs after pilot-testing on the fields, and (6) the completed ICT programs are distributed nation-widely.

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### **Keywords:**

ICT Education, ICT competency, Gifted Education, Math Education, Science Education

**JEL Classification:** I29