

**‘Specialization in ICTs and Special Education: Psychopedagogy of Integration’
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DEMOCRITUS UNIVERSITY OF THRACE Department of Greek Philology
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NCSR DEMOKRITOS Informatics and Telecommunications Institute**

The impact of ICTs on cognitive and metacognitive skills of charismatic people

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**POSTGRADUATE
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Abstract

The present study aimed to explore the cognitive and metacognitive skills of gifted children as well as the use of ICT in the development of specific skills. The study used the systematic literature research review. Research articles and books were used to collect data. Specifically, 229 primary and secondary sources were used, which included articles published in scientific journals, books and book chapters, and dissertations. The online databases used to search for primary sources included the Google Scholar and the keywords used were: "cognitive skills", "metacognitive skills", "gifted children", "ICT and metacognitive skills" and "ICT and metacognitive skills and gifted children". According to the results of the study, gifted children progress on the same level as regular children who are older, exhibit high capacity of reasoning, creativity, curiosity, extended vocabulary and excellent memory, understand the concepts with few repetitions and are perfectionists. Some students have difficulty in communicating with their classmates because of differences in vocabulary (especially in the early years), personality, interests and motivation. The strong thinking about problem solving helps the metacognition of gifted students. Also, feedback plays a very important role so that students can use metacognitive strategies. In the long term, the difficulty that generates reflection and the analysis of what it learns greatly increases learning. Finally, ICT contributes to the development of the cognitive and metacognitive skills of gifted children as they provide opportunities for self-directed learning, mutual feedback, comparison of contradictory interpretations. Finally, technology can bridge the gap between rich and poor gifted students.

Key words: cognitive skills, metacognition, gifted children, ICT

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