

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

**MUSIC, MENTAL IMAGERY AND ICT. CORRELATION WITH COGNITIVE  
FUNCTION, IN CHILDREN WITH DOWN SYNDROME**

DEDE DIMITRA-EVAGGELIA

POSTGRADUATE  
THESIS

SUPERVISORY COMMITTEE

1. Δρ. Δρίγκας Αθανάσιος,  
Διευθυντής Ερευνών Ι.Π.Τ. Ε.Κ.Ε.Φ.Ε. “ΔΗΜΟΚΡΙΤΟΣ”
2. Ρίζος Σπυρίδων,  
Συνεργάτης Ερευνητής Ι.Π.Τ. Ε.Κ.Ε.Φ.Ε. “ΔΗΜΟΚΡΙΤΟΣ”
3. Λουκέρης Διονύσιος,  
Συνεργαζόμενος Ερευνητής Ι.Π.Τ. Ε.Κ.Ε.Φ.Ε. “ΔΗΜΟΚΡΙΤΟΣ”

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## **Abstract**

It is widely known that persons with Down syndrome as well as individuals with learning disabilities are coping with problems in their overall learning experiences. Down syndrome (DS) is one of the most usual chromosome disturbances that appears in one of every 700-1000 births and its most common symptom is mental retardation. The impact of music, imaging and ICT has been bibliographically proven to have a positive impact on people with Down syndrome and people with learning disabilities in general. The combination of these fields can help the improvement of cognitive function of these individuals. This research was based on articles in scientific journals to explore the effectiveness of the above-mentioned scientific fields. The results showed that blending music, imaging and ICT can successfully contribute to the improvement and development of cognitive functions in people with Down syndrome and in a broader context in people with learning disabilities. In conclusion, each of the three thematic fields and the interaction of these three thematic fields leads us to the conclusion that it is possible to improve and develop cognitive function.

**Key words:** Down Syndrome, Music, Mental Imagery, ICT

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