‘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

DIAGNOSIS OF DYSCALCULIA THROUGH ICT

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POSTGRADUATE
THESIS

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Abstract

The subject of this thesis deals with the specific learning difficulty in mathematics, dyscalculia. Initially, it describes the efforts of many scientists over the years to identify this difficulty as accurately as possible. After, the contribution of cognitive psychology as well as neuroscience is described in order to explain the background of dyscalculia and to lead to proper evaluation and intervention. Then, the rapid development of Information and Communication Technologies is presented, which has led to a new reality in all areas of modern life and thus could also be integrated into the field of education and become a valuable educational tool to support students with disabilities. Finally, types of software are described that they could be used in Greece to help diagnose dyscalculia as well as educational intervention.

Key – words: dyscalculia, developmental dyscalculia, ICT, learning disabilities in mathematics.

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