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Non Conventional Methods in Visual Function Training for Children with Sight Disabilities

**Barbu-Cristian Braun, Cornelui-Nicolae Drugă, Ionel Șerban,
Leonard Mitu**

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Abstract

The paper presents a new unconventional method, complementary to the classic ones, by which, through the tablet or laptop, children with different visual impairments can be assisted in the recovery process through assisted visual training. It consists in the repeated testing, through virtual and alternative games, of several aspects - key specific to the visual function, aspects correlated with the main types of pathologies that can occur during childhood. In the first part, the development is presented, through the design, programming and testing of a software interface that was the basis for the development of training through an alternative virtual game. There are presented several steps for the software interface designing and programming. After that, the researches focused on software interface testing, meaning verifying the correct score reported to the test solving and also improving the necessary time required for tests solving.

In the second part, it is exemplified how the visual training procedure through the virtual game was applied in complementarity with other classical and nonconventional training procedures, for some concrete cases. As a conclusion, it was found that the method, an accessible one, was, on the one hand, accepted by children, parents, optometrists and educators. On the other hand, the proposed method proved quite effective for the period when the alternative training procedure was applied for the children in question, the test results continuously improving. In the paper is presented just



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the first step in terms of applying the developed method for visual screening or training activities.

Keywords: visual impairments, virtual games, visual training, software interfaces

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