

PSYCHO EDUCATIONAL EFFECTIVENESS OF A STUDYING METHOD BASED ON THE USAGE OF A TABLET SPECIFICALLY DESIGNED AS A COMPENSATORY TOOL FOR SLD

AUTHORS

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The Assistive Technology (Assistive Technology Act, 1998; WHO, 2011; Federici, Scherer, 2012) within a bio-psycho-social approach may represent a working method interfacing pedagogical, medical, psychological and engineering professionals in pursuing a really inclusive education for pupils with specific learning disability (SLD).

In the school years 2012-2014, a multidisciplinary team composed by doctors, nurses and speech therapists (ASL Roma D) along with bio-psycho-social research methodologists (University of L'Aquila) and information technology professionals (Digitally Different Srl) conducted an 18-month long trial to assess the psycho-educational effectiveness of a tablet specifically designed as a compensatory tool. Among the technological solutions ensuring the use of educational support (Law 170/2010; DM5669/2011) a tablet which could provide a variety of software in a single technological solution, matches the criteria of "competence", "consonance" and "contextualization" (Andrich, 2009) if implemented in a conscious and inclusive environment.

For this purpose, about 400 students from 8 primary, secondary and high level schools in the hinterland of Rome were involved in the trial. In addition to the group of students with certification of SLD in the absence of cognitive impairment and pre-existing psychopathological disorders which has been the target group (students placed in learning environment facilitated by "EdiTouch" tablet) a control group B (children with and without SLD) has been involved in the trial. The control group was made of about 150 students, 50 of which with a diagnosis of SLD (who have not used the tablet) and the other about 100 without a diagnosis for SLD (use versus non-use of tablet) balanced for chronological age and socio-economic conditions.

The assessment battery enabled us to observe teaching effectiveness aspects, psychological well-being and skill levels aspects, tested on the longitudinal course of the trial from beginning of the design, to the insertion of the compensatory instrument and follow-up at 18 months from starting the project.

We have been following the action research model, which aims at activating a process of change through the contribution and the participation of the subjects

involved. The longitudinal research design allowed the systematic observation of individual and context variables, during the experience, interpreted according to the modeling of risk and protective factors in childhood.

Essentially innovative was the planning of a capillary "computer literacy" program for pupils, parents and teachers (a feature lacking in other similar experiences reported in the literature) in order to create a facilitating environment at home and at school thanks to a competent network (teachers/students/parents).

About half of the sample with SLD had previously used compensatory software on a PC. Instead 72% in the group of teachers was aged more than 40 years.

The results obtained in the sample examined indicate that the personalized method of study, centered on the use of EdiTouch tablet in conscious environment, favors greater capacity in terms of academic performance, higher self-esteem, autonomy and motivation, in a short time. This encourage us to believe that this better school achievement will be gained consistently also in future.

From an educational point of view, more than 70% of the subjects in all three categories involved (teachers, students, parents) had no hesitation in declaring the greater effectiveness of this tool compared to other PC compensatory tools available in the market.

FOR MORE INFORMATION:

On the tablet EdiTouch - <http://tabletascuola.net>

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