

“Investigación en (más o menos) 500 palabras”

4. Analytical abilities, creativity and school achievement – “friends” or “enemies” in the identification and development of academic talent at early age

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Chilean educational system is highly stratified and segmented and there are notorious differences between the types of schools attended by students from wealthier families and those that educate children from low-income families (Mella, 2003). Unfortunately, there are persistent inequities in the quality of education obtained by students, depending on their socioeconomic status. Only 9% of the total primary and secondary school population attends exclusively private institutions (Organization for Economic Cooperation and Development, OECD, 2004). In a great degree, the type of school which a child attends could be used as an indicator of the socio-economical status in Chile: students from poorer families attend municipal schools; those from medium socioeconomic sector preferably attend private-subvention institutions; and most students from higher socioeconomic levels attend private schools. The question we face is therefore: How and when an educational intervention would work for children from low socioeconomic status in order to reduce the breach in the quality of education? According to the theory of skill formation (Cunha et al., 2006), the skills and abilities acquired in one stage of the life cycle affect the productivity of learning in the next stage. And when the opportunities for formation of both cognitive and noncognitive abilities are missed, remediation can be costly. That is why, “an optimal investment strategy is to invest more at younger ages and relatively less when a person is old” (Cuhna et al., 2006, p. 710). For these reasons, in 2007 PENTA UC created an educational intervention for younger talented children – the PENTA UC Escolar¹. This is an extracurricular, enrichment program, designed for children from 1st to 4th grade which

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works into the regular school classroom. The program consists of Identification and selection system, Curriculums and Manuals in Language and Mathematics and a Management model.

The present study is focused on students from third and fourth grade who took part in the program PENTA UC Escolar. Our goal was to explore analytical abilities and creativity, and their relationship with school achievement in Language and Mathematics. Results would suggest us how to improve the identification of talented children and moreover, how to offer them better educational opportunities. A total of 2091 children were explored, 285 from them were identified as talented. Our results revealed a negative relationship of achievement in Language and Mathematics with figural reasoning, verbal reasoning and figural speed, but a positive one with numerical creativity. Furthermore, Mathematics achievement was positively related to figural and verbal memory. When gender and age differences were considered, boys demonstrated higher analytical abilities (only in talented group) and girls have higher practical abilities (only in the group of regular students). In both talented and not talented groups, older children demonstrated higher abilities.

In summary, our study demonstrated that school achievement is not necessarily positively related to high intellectual capabilities (or at least some aspects of them), which could be considered during the identification process.