Chapter 6

Personal Learning Enviroments:
Meeting the Special Needs of Gifted Students

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ABSTRACT

Gifted Students, in spite of their very well known characteristics, have specific education needs in order to achieve their potential. Although they do not present a special educational need in the common meaning, they have very particular learning needs that, if overlooked, may lead to adverse feelings towards school and learning that can result in academic failure. Authors in the field agree that giftedness can and must be developed and providing challenging and facilitative learning environments is the first building block. The PLE, held up by WEB 2.0, for its openness and possibilities it offers to learn autonomously, resorting to exploration, discovery, networking with like-minded peers and experts fits the style and pace of learning of its user and shows to be a tool to fully suite the particular traits of these students. In this chapter a 5 dimension ple is conceptualized that accommodates the cognitive, emotional and education needs of gifted students.

INTRODUCTION

Giftedness, the potential for exceptional achievement, is normally characterized by high intelligence and creativity. Frequently it is associated with high Intelligence Quotient (IQ) scores, which is a highly limiting approach and excludes a broader and complex dimension that involves other facets of gifted people. Gifted individuals exhibit a complex of cognitive, perceptual, emotional, motivational and social traits. The issue of giftedness has attracted attention and interest over time, creating myths that contributed towards misconceptions about gifted individuals. Usually, when one refers to gifted students we think of someone with outstanding intellectual abilities, with high levels of cognitive interests, fast learning and, therefore, that easily overcome obstacles and do not experience any difficulties in academic life. Seen in this way, there would be no reason to take particular care for the education of these students. It would seem that these students always learn, whatever the circumstances, good or bad, that make up their study environment. In fact, gifted students do have special needs that may cause several problems that can lead even to school dropout. Gifted students underachieve for many reasons and in many different circumstances that range from obstructing disabilities to lack of motivation and interest in school activities.

Several authors agree that we must regard giftedness as something that can and must be developed, stressing the importance of learning environments (Gagné, 1999; Heylighen, 2007; Endepohls-Ulpe, 2009). As Endepohls-Ulpe (2009) correctly states, students with a rapid learning pace, highly effective information processing capacities and memory skills, often associated with high learning motivation and a growing need for knowledge, will suffer from boredom and under-stimulation if their special needs are not met. Lack of challenging experiences and lack of a sense of achievement will, in the long run, decrease or destroy their motivation and affect

their intellectual development (Endepohls-Ulpe, 2009). Therefore, their capabilities risk not being developed due to environmental issues or even due to avoidance related with the lack of adjusted responses that may lead to disinterest in school and consequent failure.

As many education professional acknowledge these students experience several difficulties during their education, despite the relevance of their particular qualities (Senos & Diniz, 1998). Steps have been made in order to actively respond to these students' particular needs, however there is still a major lack of educational strategies to support gifted students education. They require services and activities not ordinaryly provided by school in order to fully develop their capabilities (Johnsen, 2004; Renzulli, 2002; Brown, Renzulli, Gubbins, Siegle, & Zhang, 2005). Gifted students demand flexible and differentiated learning strategies that comply to their special educational needs in order to develop their potential. Otherwise we risk not being able to provide meaningful and enjoyable learning experiences that take advantage of what these students can potentially offer. However, even the more willing teacher who strives to be proactive in this respect is faced with constraints to implement individualized teaching and learning that often reveals itself to be hard work in today's classroom that still suffers from the "syndrome" of teaching for the masses.

The implications that computers and the Internet have in providing new and meaningful experiences in education is unavoidable. The use of technology to enhance education is well documented, it being clear the associated motivational load that it triggers in all students, eager to explore it and play and learn with it. It has been observed that technologies and web experience are advantageous in general and special education, acting as innovative learning tools and promoting access and participation for all students (Ribeiro, Moreira & Almeida, 2009). The Web 2.0, the new concept of the Internet, is now a two way process, where users can easily interact, create and share

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