

## Chapter 36

# New Technologies to Support Educational Inclusion

**S. Macchia**

*“Giovanni Arpino” Institute, Italy*

**D. Bossolasco**

*“Giovanni Arpino” Institute, Italy*

**A. Fornasero**

*“Giovanni Arpino” Institute, Italy*

### ABSTRACT

*In this chapter, the authors present the first thoughts after the experience gained, still in progress, made by the Working Group Handicap (GLH) of our Institute on a set of six children with mental deficiency (DM), aims to encourage their inclusion in school using the e-collaboration. In the present study, three different modes / communications environments were compared in a context of cooperation between e-deficient students. Each child was accompanied by a teacher - tutors who monitored, for each environment, social context, interactivity, privacy and the feeling of privacy, online communication, and the degree of socialization achieved.*

### INTRODUCTION

In recent years the Italian school is experiencing a steady increase in technology available to students and teachers in support of traditional teaching. Our institute has a classe2.0, which affects about 20 pupils, and scuola2.0 regarding primary school students. This innovative process has to consider children with Special Educational Needs (BES)

because they use language, code or different communication tools from the common verbal language and often the rest of the class is totally unprepared not only to communicate but also to address the different diversity. Help overcome the barrier of communication is therefore an essential first step to create a classroom climate is inclusive, so the idea behind the present paper, the goal of our Institute is to create a ‘resilient schools’ or’

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a place where all children with disabilities and without disabilities can have a success in the field of emotional, cognitive and interpersonal “(Doll, 2004). The road to a ‘resilient schools’, also synonymous with ‘inclusive education’, however, is fraught with difficulty: certainly not enough to physically insert the disabled person in a school community and, very often, but production is also misleading to look at all the costs equality, because equality is not respected real offering equal opportunities to persons with different needs. A potentially effective way to promote inclusion in schools and also the development of cognitive skills is the use of information technologies such as e-collaboration.

The Institute Giovanni Arpino is about 40 km from Turin in northwest Italy. The student population is approximately 1100 pupils, aged between 3 and 14 years, of which 3% with a disability (90% of those with mild mental impairment medium- and increasingly diverse forms of disability, both physical and mental) and 15% are foreigners. This chapter describes the experiment carried out on some children with mental deficiency (DM) with the aim of characterizing the environment of online communication that promotes a greater extent the e-collaboration, and then clearly, albeit still primitive, about the potential of online collaboration to promote inclusion in the community school. Specifically in this work were compared three different CMC where you can e-collaborate, instant messaging (using [www.skipito.com](http://www.skipito.com)), play and chat (using [www.habbo.it](http://www.habbo.it)) and virtual reality and chat (using <http://teen.secondlife.com>), highlighting the strengths and future prospects. The CMC used, each with different characteristics for different purposes, were: “Skypito” ([www.skypito.com](http://www.skypito.com)) is available as a freeware instant messaging and VoIP, “Habbo” ([www.habbo.it](http://www.habbo.it)) is a world virtual free where teenagers can chat through custom avatars: “Second Life” (<http://teen.secondlife.com>) is a 3D virtual environment dating back to June 2003. The CMC used for e-collaboration are evolving: we started from

email and synchronous discussion to arrive in the last decade in virtual worlds. Nowadays, virtual environments are becoming increasingly popular as a means to interact, chat and spend time with friends and new acquaintances. According to De Freitas (2008) Virtual worlds are divided into five categories, but according to the activities that I can remember learning to play for the Worlds Play (Habbo) and Social Worlds (Active Worlds and SecondLife): SecondLife in users do not want know who is behind the avatar than users of chat (Skype, MSN), who feel the desire to meet in person, as they consider the experience in the virtual world entirely satisfying and entirely subordinate to that of real life. Even for users with disabilities virtual environment offers the possibility of exceeding the normal physical limitation, and do almost anything, human, or even “super-human” is thus a tool that potentially leads to the same levels all students, whether disabled (Vickers, 2008. Wilson and colleagues (Wilson et al., 1997) have also shown that the sense of freedom and well-being felt by children / adolescents with disabilities in virtual worlds can then create a dependency on this artificial reality. Is it therefore preferable to those using a CMC for it to be without virtual reality or with virtual reality? According to various authors virtual worlds with chat, unlike the instant messenger, could be a great tool to help develop social skills, establish positive interactions and enhance capacity for solve even complex social situations (such as a context of provocation, the pressures of a bully, etc..) (McComas, 1998).

## **BACKGROUND**

According to some authors the use of computers can be tremendous opportunity for the inclusion of students with varying degrees of disability provided that you have to carefully choose specific software based on pupil’s learning needs, and especially under the aspect of motivation involved

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