Chapter 5.2

# Children with Special Needs as a Virtual Community

**Tas Adam**
*Victoria University, Australia*

**Arthur Tatnall**
*Victoria University, Australia*

## INTRODUCTION: CHILDREN WITH LEARNING DISABILITIES

The term learning disability (LD) refers to any retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, writing, arithmetic, or other school subjects resulting from a psychological handicap caused by a possible cerebral dysfunction and/or emotional or behavioural disturbances (Adam & Tatnall, 2002). It is not the result of mental retardation, sensory deprivation, or cultural and instructional factors (Kirk, 1962). Specific learning disabilities is a chronic condition of presumed neurological origin that selectively interferes with

the development, integration, and/or demonstration of verbal and/or nonverbal abilities. Specific learning disability exists as a distinct handicapping condition and varies in its manifestations and degree of severity (Adam & Tatnall, 2003). Throughout life, the condition can affect self-esteem, education, vocation, socialisation, and/or daily living activities (ACLD, 1986, p. 15). Two definitions of LD are well supported: a legislative definition from the United States found in the Individuals with Disabilities Education Act (IDEA, 1997) and the one proposed by the National Joint Committee on Learning Disabilities (NJCLD, 1994), a consortium of representatives from organizations interested in LD.

In many countries there has been a dilemma concerning school membership for students with

learning disabilities. Should these students be kept in mainstream schools or moved into special schools designed to cater for their needs? Numerous "integration" or "remedial" programs have proved inefficient towards the total learning of this group of students. Researchers including Agran (1977) and Bulgren (1998) support the view that students with learning disabilities require an alternative approach to their learning. Although many authors claim that it is best to integrate these students into classes within mainstream schools, there is strong evidence to support the existence of segregated schools. These schools exist on small funding support from the government and they try to cater for individual differences in a significant way. The chapter will refer to these students with special needs under the generic term learning disabilities (Adam, Rigoni, & Tatnall, 2006). In recent times technology has played a significant role for specific disadvantaged groups, such as the blind and those with movement disabilities, in providing a means to facilitate communication and education (Poon & Head, 1985). Other research, including our own, has shown that it can also be used to advantage for students with learning disabilities.

Literature from the Australian Bureau of Statistics (ABS, 1996, 1997) and the Ministerial Council on Education, Employment, Training and Youth Affairs (1997) indicates that the prevalence of LD is approximately 10-15% at the primary school levels, and is still significant at the secondary school level at 5-10%. Figures for Australia follow similar trends to those from the USA and other countries (NJCLD, 1994).

In this chapter we will begin by investigating the concept of a virtual community, and then proceed to relating this to those educational institutions concerned with the education of children with special needs. The chapter will then outline how the Internet can assist with the education of these students, how it can be used to set up a virtual community, and the likely future trends for this use.

## VIRTUAL COMMUNITIES

A *community* can be seen as a group of people having something in common (Oxford, 1973), and this is certainly true of special schools which have in common the education of children with some form of learning disability. A *virtual community*, on the other hand, is also a group of people who share a common interest or goal, but who do not meet physically, but communicate and relate to each other by some other means, principally the Internet (Matathia, 1998; Schneider & Perry, 2001, p. 10). Rheingold defines virtual communities as "social aggregations that emerge from the Net where enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (Rheingold, 1993, p. 5). Here Rheingold is referring to ad hoc virtual communities, but in the case described in this chapter at least the initial members of the virtual community were determined in advance.

There are a number of alternative names for virtual communities, such as "communities of interest" (Hagel & Armstrong, 1997) and "Internet cultures" (Jones, 1995). Barnatt (1998) suggests that there are two categories of virtual community: off-line and online. Both categories share common interests and bonds, but online, Internet-based virtual communities today "allow a wide range of global individuals to argue, share information, make friends, and undertake economic exchanges, in a flexible and socially-compelling common on-line arena" (Barnatt 1998). In contrast, members of an off-line virtual community do not communicate directly with one another but are reliant on "broadcast" media such as newspapers, TV and radio to sustain their common interests or bonds.

The term "online community" has various interpretations and Armstrong and Hagel (2000)

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