Chapter XV
Ethical Controversy over Information and Communication Technology

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ABSTRACT

'What positive and negative aspects are perceived of Information and Communications Technologies (ICT)?' and 'What dilemmas arise regarding these technologies?' are the two questions addressed in this chapter. First of all, we have conducted a theoretical analysis comparing various ICT characteristic from two different perspectives: the positive and the negative ones of ICT. Secondly, we present the results in two work modules conducted in the Observation Laboratory of Technoethics for Adults (LOTA) project, already explained in the previous chapter, with an inference towards intervention.

to my nephews

INTRODUCTION

It is important to determine (Edwards, 1997; Rumbo, 2007) what type of learning society we want, that is: a manner of socialization of community rules and practices (to distinguish between advantaged and disadvantaged students); a way of providing competitive individuals to the neoliberal labor market; or a network of continuous learning influenced by information technology. And before these three stances, a possibly eclectic one, in our opinion, might be a learning community based on educating all people to become future citizens and adapt to the labor situation and in this regard, ICT can help achieve this aim.

It is not a matter of presenting an entirely positive or negative situation regarding ICT, although considering both sides allows an ethical reflection of these technologies which is necessary (Hogue, 2007) in different fields such as we are invited to do by, for example, UNESCO, which has considered this a priority since 2002

(Ten Have, 2006). Although the medical field is the one that has worked the most on the topic of healthcare ethics and bioethics, the lack of studies has also been criticized (Marziali et al., 2005). Also, nanotechnology, such as the current scientific revolution applied at a nanoscale to technologically manipulate molecular structures and atoms, is also provoking certain axiological controversy (Ebbesen et al., 2006) in areas such as: genetic engineering, research of stem cells and transgenic products. This reality leads to proposing the need for a deeper understanding of the being and acting of ICT.

THE YIN AND YANG OF ICT

Martins and García (2003) are of the opinion that ICT can facilitate the passage from the knowledge society to wisdom. A dilemma surrounding ICT between technology optimism and pessimism. Obviously the third environment or space for ICT presents a series of risks (Echeverría, 2004) in various areas: technological, economic, military, political, social, legal, ecological, moral, religious, aesthetic, epistemic and basic, although, extending the author's thesis, it also provides relevant macrosocial and individual possibilities. This seems interesting and perhaps we should aim for an intermediate Aristotelian position which would be wise indeed. Certainly, the exclusive and extremist principle of absolute precaution before ICT (Luján and López, 2002) is not the right course, but rather a more eclectic one should be adopted. In this regard, for example, García (1998a, b) proposes 7 "virtues" and 7 "sins" of ICT (the basis for the first activity proposed in this chapter). It is also very interesting to review the ERIC base (2007), with references to the benefits and the detrimental aspects of technologies, as well as the paper by Luján and Told (2007) based on the perception of citizens themselves to analyze the relationship between the role of science and technologies and values.

ICT are a service that is spread worldwide, but not yet reaching all or not all reaching them in the same manner (Benadou, 2005), that is, here too there is social inequality, which Castells (2002:22) has summarized in two ideas: first, "web connection and flexibility allow connecting with that which is valuable and reject that which is valueless, either people, companies or territories"; and second, "the extreme underdevelopment of technology infrastructures in most parts of the world is an essential barrier towards development". If in 2000, only 3% of the world population used the Internet, by 2007[1] the figure was 16.6%. This increase is positive, but certain clarifications must be made such as that in Canada or the United States the percentage reaches 70%, yet in most countries in Africa it barely amounts to 4%. Or that Asia (35.6%) and Europe (28.6%) present the highest percentage compared to the rest of the world. Although discrimination can be observed, for example, by gender[2], since in childhood girls (76%) use computers more than boys (71%), but in adulthood this trend is reversed (60% of women and 70% of men) due, to a great extent, to the greater family obligations for females, which condition the time available compared to men to devote to ICT. In Spain, for example, the profile of an Internet user is male, between 35 and 36, residing in a province capital, and only 10% access the Internet through broadband, according to 2006 data.[3] All this evidences a digital gap which, in our opinion, must be overcome in order for the country to progress equally both internally and in relation to other countries. We refer to Castells (2002) and his Marshall Plan proposal for the Information Era with various strategic recommendations such as, for example, a social economy based on high technology for expert on-line systems on healthcare, distance education, avoiding the bottleneck on information and technology education or preventing the brain leak of developing countries by extending quality networks worldwide.