Italian University Students and Digital Technologies: Some Results from a Field Research

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Abstract. Developments in information and communication technologies have raised the issue of how a kind of intergenerational digital divide can take place between “digital natives” and “digital immigrants”. This can in turn have important consequences for the organization of educative systems. In this paper we present the result of a research performed during the course of 2008 to study how university students in Italy make use of digital technologies. The methodology was based on a mix of quantitative and qualitative approaches. A survey research was done, on a sample of 1186 students of the University of Milan-Bicocca, based on a questionnaire administrated through the Intranet of the University. A series of focus groups and in depth interviews with students, parents, and new media experts was furthermore performed. The results are consistent with the presence of a strong intergenerational divide. The implications of the results for the future organization of educative systems are discussed in the paper.

Keywords: digital natives, digital immigrants, social networks, education.

1 Introduction

The development of the so-called “Knowledge Society” is strictly linked to the increasing pervasiveness of information and communication technologies in all aspects of everyday life. Even fields that are traditionally quite resistant to changes need to adjust to the strong transformative power of these technologies. The case of education represents a paradigmatic example of how technological advancements can determine the possibility to introduce significant innovations, that have anyway to take into consideration the need to find a correct balance with traditional procedures and organizational practices; old models and processes of knowledge transmission through generations have to be somehow adapted to a new situation: “Contrarily to what happened previously to older generations when radio and, particularly, television emerged, digital technologies, and the services associated with them, convey something completely
new: they modify not only the speed at which people deal with and manage information but also how they eventually transform it into knowledge” [1].

The issues at stake are manifold, and will probably grow in relevance in the next future. As far as the organization of educational systems is concerned, one of the point that deserves a specific attention is linked to the potential development of a sort of intergenerational digital divide, as the one described by Papert [2] in The Connected Family. Papert underlined the fact that, given their style of “enlarged communication” [3] and their strong technological alphabetization, the Digital Kids (i.e. children that grow up in societies where Internet connections, mobile phones and videogame consoles are readily available) were likely to develop communicative practices and attitudes radically different from those of their parents and teachers. Making reference to a well known classification developed by Prensky [4], this intergenerational divide is based on the contraposition between “digital natives” and “digital immigrants”: while “digital natives” show a growing enthusiasm for computers and digital technology, this enthusiasm often scares teachers, parents and scholars.

Digital natives, says Prensky, communicate and learn making an extensive use of digital tools, such as computers, video games or online encyclopedias, and this “extended digital environment” often represents their natural learning environment [5, 6]. These tendencies are further reinforced by the diffusion of social and communication applications as the ones that characterize the so-called Web 2.0 [1]. On the other side, digital immigrants on average still make use of more traditional tools such as books and libraries and can therefore have some difficulties in fully understanding the potential of digital technologies in the training field. This not only can result in a diminished efficiency of training processes overall, but can also be negative on a specific motivational ground, as long as there is the risk of creating a discrepancy between the ways in which learning and communication take place in ordinary life and the ways in which learning and communication take place in formal training environments. This does not hold only for kids and pupils, but it concerns every level of education, as long as also University students have to be considered as digital natives [7].

Many different empirical studies have, especially in the last few years, brought evidence in support of Prensky’s thesis. A recent research of the U.S. National School Boards Association (NSBA) [8] shows that the number of hours spent at the computer by pupils and college students has now equaled the amount of time spent at watching television; moreover, a significant proportion of this time is not used only for video gaming and purely recreational ends, but also for educational activities such as “studying” or “creating and sharing content”. According to NSBA data, the 59% of children and college students interviewed uses the Internet to download or search for texts and educational content and to find information or news related to teaching, while the 50% uses the network as an extension of the group work done at school: to “do the homework”, to connect to virtual classes, to realize collective on line works, to receive tutorship and assistance from teachers. Digital natives are more and more using the web also to socialize and as a way of self expression: more than 37% of them update their site every week, the 30% have a blog and the 17% post a new content in it at least once in a week.

It must be underlined that this increasing rate of usage of digital technologies can lead to the development of learning attitudes that can be quite different from the traditional, “analogic”, ones. Some authors point to the existence of a sort of