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Digital literacy and cyberconvivencia in primary education

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Abstract

Education is currently facing a critical challenge: literacy of children for digital culture and digital citizenship. Information and Communication Technologies (ICT) is a socializing instance of childhood. The universal use that children make of ICT today broadens the context of interpersonal relationships. The aim of this study is to present the collected data from a sample of 3rd to 6th grades of Primary Education. The objective is defining their Internet and mobile phones usage patterns, and to analyze which cyberconvivencia related communicative processes are established. Internet usage patterns are very similar between both stages, although there are some differences on the activities that take place on the Internet. The data presented in this study shows the need of focussing action from earlier ages.

1. Main text

Formal and compulsory education is currently facing, among others, a critical challenge: literacy of children for digital culture and digital citizenship (Berzosa, 2015; Sánchez-Antolín & Paredes, 2014; Del Rey, Houses & Ortega, 2012; Gutiérrez, 2007). Digital literacy for every citizen is needed in order to successfully face the transformations that Information and Communication Technologies (ICT) are assuming in all areas of people's daily life: at relationship level, at communication level, at learning level, at curiosity satisfaction level, at entertainment and leisure level (Machargo, Luján, León, López & Martín, 2003; Castellana, Sánchez, Graner & Beranuy, 2007). Nowadays, children in their early childhood are living what Malo & Ferrer (2010) identify as "children of the media". Audiovisual

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and electronic media play a major role in their daily activities, shaping and defining their experiences and how these become internalized. As Gil, Vall-Llovera & Feliu (2010) state, the use of Information and Communication Technology (ICT) is part of our daily lives and is intrinsically linked to people of all ages and their relational environment.

Authors such as Pettit (2009), Süss, Lampert and Wijnen (2010) or Area (2014) argue that ICT is a socializing instance of childhood, as well as they are family, peers and school. The universal use that children, youth and adults make of ICT today (National Institute of Statistics, 2015; National Institute of Communication Technologies, 2014) broadens the context of interpersonal relationships and opens it to new forms of expression and communication (Ortega, Casas & Del Rey, 2014; Amichai-Hamburger, 2013). Both digital natives and digital immigrants (Premsky, 2010) use ICT on a regular basis, specifically the Internet. However, teenage and youth population is the one who more quickly and widely has been digitalized in their habits, in contrast to the adult population. A large number of studies focus on this population, analyzing the different aspects related to their use of the Internet (Del Rey, Casas & Ortega, 2012; Rial, Golpe, Gómez and Barreiro, 2014; Gómez, Rial, Braña, Varela & Barreiro, 2014; Vanderhoven, Schellens, & Valcke, 2014; Ortega et al, 2014; Garaigordobil, 2015; SaveTheChildren, 2016). There are also studies focused on previous ages as childhood's early years or preadolescence (Area, Borrás & San Nicolás, 2015; Aguaded, Marín-Gutiérrez & Díaz-Parejo, 2015; Fernández-Montalvo, Peñalva & Irazabal, 2015; Pérez-Rodríguez Ramírez & García-Ruiz, 2015), although they are not as abundant as the ones focusing on higher ages. However, reality shows both age groups regularly use the Internet in order to receive, create and manage information, both their own and other's (Del Rey et al, 2012; Marín & González-Pinal, 2011; Mayorgas, 2009).

All of this is modifying, as Ortega et al. (2014) point out, the way in which children of different ages interact with others. The irruption of the Web 2.0 has led to the emergence of new social, communicative and relational practices that involve new ways of producing, distributing, exchanging and receiving information through the electronic media (Lankshear & Knobel, 2009). These activities shape the communicative and socializing processes, distinctive of the digital environment. These activities also use specific expressive codes and communicative actions, which differ from hard copy files' writing and reading means of communication (Bautista, 2007).

Ortega et al. (2014) highlight the fact that "social life of students (...) has on the communicating digital device an extension of a direct scenario in which so far has been occurring the relational process known as coexistence" (p.616). The research and analysis of the concept of school life in the analogical area has been widely developed by different authors (Torrego, 2007; Pérez-Fuentes, Gázquez, Fernández-Baena & Molero, 2011; Ortega-Ruiz & Zich, 2013; Álvarez-García Rodríguez, González-Castro, Núñez & Álvarez, 2015; Peñalva, López-Goñi, Vega-Osés & Satrústegui, 2015). At the moment, it is needed to extend this study to the area of indirect or digital social relationships. According to Ortega-Ruiz (2012) and Ortega-Ruiz et al. (2014), coexistence in the digital area is defined as cyberconvivencia. The use of ICT by children of varying ages significantly increases the complex context for interpersonal relationships (Amichai-Hamburguer, 2013; Ortega-Ruiz et al., 2014).

2. Methodology

The aim of this study is to present the collected data from a sample of 3rd and 4th grades of Primary Education (second stage) and 5th and 6th grades of Primary Education (third stage). To begin with, the objective is defining their Internet and mobile phones usage patterns, as well as observing if there exist differences among the different stages. Secondly, the aim is to analyze which cyberconvivencia related communicative processes are established. In this second case, the sample used is the group of students belonging to the 5th and 6th grades of Primary Education (third stage), since they are more active regarding this aspect.

2.1. Participants

The sample of this study is composed of 401 students from 3rd to 6th grade of Primary Education. In Table 1 it can be seen the distribution of the sample by sex, grade and stage. It can be observed that boys add a total of 228 (56,9%) and girls add a total of 173 (43,1%). All of them are students of a Pre-school and Primary Education centre in the region of Navarre (Spain).