Young users and the digital divide: readers, participants or creators on Internet?

Abstract
This article analyses how young people, parents and teachers perceive the uses of digital tools and environments made by those known as digital natives. The research combines analysis of an extensive bibliography on the subject with the results of field research based on 30 focus groups, involving 120 youngsters and 60 adults in five Spanish cities, within the framework of a national study. The results show that while adults consider that young people use technological tools in complex ways directed towards content creation, teenagers perceive themselves as mainly readers and participants on the Net.

Keywords
Social networks, Internet, digital natives, young users, participation, digital divide

1. Introduction: young people and adults in the digital environment

Information and Communications Technologies (ICTs) are playing a role which is extremely relevant yet also surprising and paradoxical for communication research. One of the major aspects to be analysed is how these technologies generate inter-generational conflict and tension. Indeed, the concept of digital divide has become a core aspect of the study of digital technologies in the field of social sciences. The digital divide is a complex phenomenon, linked to the digital inclusion and exclusion mechanisms inherent in advanced social structures (Castells, 2009).

As the first stages of the divide are bridged – those related to social exclusion due to economic and technological reasons (the access divide) – new stages of the digital divide become relevant. These are principally based on the differences that exist in the use, significance and appropriation processes (known as the use divide) (Busquet et al., 2012). In this second stage of the digital divide, study of the generational digital divide becomes particularly relevant and, therefore, so does research related to the differences between young people and adults regarding their day-to-day appropriation of ICTs (Tapscott, 1998, 2009; Prensky, 2001, 2006; Livingstone, 2002; Boschma, 2008).

The Net Generation is made up of those young people who have been surrounded by digital media and virtual environments since birth and who often have greater knowledge than their parents and
adult role models of what is an essential innovation for society, and about which they display a surprisingly active attitude. This new generation thus acts as a force of social transformation as it establishes communication and relationship processes which are very different to those established by their adult relatives. (Tapscott, 1998, 2009). They have grown up surrounded by the products and devices characteristic of the digital era. Computers, tablets, video games and mobile phones with Internet connection are an integral part of their lives; and as a result, these devices have become key tools in establishing new forms of leisure, relationships, communication, socialization, and also of learning (Prensky, 2001, 2006).

Research related to the inter-generational digital divide (or gap) thus reveals a scenario in which adults (the so-called “digital immigrants”) are confronted in both family and school contexts with young people who are radically different to them because of their essentially digital nature. This creates a need to re-assess and re-negotiate relationship guidelines; indeed, even to invert the conventional evolutionary and educational process, in which the greatest knowledge and control of the social environment was gained in adulthood (Jenkins et al., 2008). What authors such as Henry Jenkins (2006) term “new literacies” are developed and applied in digital cultural practices which young people employ particularly in leisure spaces, often without any family or school accompaniment. This is replaced by collaboration between peers in non-formal and informal learning communities.

This generational cultural (and digital) gap results in new fears and uncertainties for adult generations. In many cases, these fears spring from a lack of technological knowledge or the uncertainty generated by the new ways in which young people use technology. This is not a new phenomenon; in contrast, it is a behavioural pattern which is repeated each time a new technological device emerges and leads to a significant change in young people’s digital cultural consumption in leisure contexts, as with television or video games in the past. These “moral panics” are usually accompanied by an apocalyptic conception of the appropriation and use of ICTs by young people (Buckingham, 2005).

These defensive attitudes tend to result from a view of children and young people as excessively vulnerable and not very competent beings who thus need to be overprotected (Potter, 2003). On this point, the perplexity felt by many adults when facing a situation which is to some extent beyond their comprehension is understandable: while young people make a significant effort to negotiate the technological barriers which adults place on their activities, many adults feel that they are losing the authority which justifies these barriers (Livingstone, 2002). However, this perplexity, when it evolves into distrust and fear, contributes to and promotes the construction of stereotypes about adolescence and youth, often making these an object of continuous criminalization.

While it is true that adults’ lack of knowledge about ICTs may foster excessively dramatic and calamitous attitudes, it may also generate overly-optimistic attitudes. It might be said that, regarding the implementation of new media and technologies, a very particular relationship involving both distrust and fascination is established (Busquet, 2008). Some now-familiar concepts such as digital natives (Marc Prensky), the Net generation (Don Tapscott) and the Einstein generation (Jeroen Boschma) may promote a distorted, unreal view of the generations who, despite having been born in a fully digital environment, do not lack necessary adult guidance as a result. For this reason, this paper takes as a starting point the conception that ICTs may present an excellent opportunity to re-assess (and re-negotiate) relationships between adults and young people, both at school and in the home.

2. Objectives, methodology, techniques and sample for conducting the fieldwork
The aim of this paper is to take a qualitative approach to perceptions about the generational digital gap, which were outlined in a wider research study carried out within the framework
of the National Program of Social, Economic and Legal Sciences of the National R+D+I Plan 2010–2012. A very specific aspect of the generational digital divide is analysed here: young people’s perception of their own skills and competencies regarding ICTs and, more specifically, of their own profiles as users of said technologies.

This article is essentially based on the results obtained in the qualitative analysis of 30 focus groups carried out in five Spanish cities which have different levels of ICT penetration: Barcelona, Madrid, Santiago de Compostela, Sevilla, and Zaragoza. In each city, two state secondary schools were selected, and in each school three groups were set up: one with students of ESO (Compulsory Secondary Education, for pupils aged 12-16), another with students of Bachillerato (Post–Compulsory Schooling, for pupils aged 16–18), and a third consisting of parents and teachers. There were a total of 6 focus groups in each city, consisting of 180 people; of those, 120 were young people aged between 12 and 14 (ten focus groups) and between 15 and 17 (ten focus groups), and a total of 60 adults in the category of educator and/or family member. The focus groups were carried out between October 2011 and March 2012.

Analysis of the transcriptions of the focus groups was carried out following the taxonomy set out by Jane Hart (2008), who proposes a distinction between three levels of commitment regarding social media and networks, equivalent to three user types: reader users, participant users, and creator users. Readers (or passive consumers) are those users whose online activity is limited to surfing or consultation: they read web pages, blogs and wikis; they watch videos and look at photography web pages, they listen to podcasts, visit websites containing PowerPoint presentations, subscribe to RSS feeds, etc. In other words, they read and consume information without actively participating in any of the Internet forums that they visit.

Following Hart’s model, a second category is that of participants or active contributors; these can be understood as those users who contribute, share and connect with each other. Here, it should be kept in mind that Hart’s categories are accumulative. That is, users on this second level collaborate in the generation of social capital by participating as readers, but also by sharing content. These users contribute by sharing, evaluating and discussing information available on the Net, or else by participating in blogs and editing wikis and other shared documents. These users do not only consult or search for content; rather, they mobilize content through linking tools, social networks or RSS. They also connect with each other through the use of instant messaging, e-mail, microblogging services or social networks.

The last category, that of creators, encompasses those users who in addition to the aforementioned activities create and share their own content. Within this category, Hart describes two levels: those who create and share texts, images and videos on any type of online service, and those who also generate collaboration opportunities by creating a new blog (where others may comment), a wiki or a social network, among others. Based on these typologies, Hart defines the profile of a new learner or, expressed in another way, an e-learner who, regardless of his or her date of birth, is connected to Internet 24 hours a day, seven days a week, and is highly committed to daily use of the tools offered by social media.

1 This paper offers partial results of the AUSTICA R+D research project entitled “The use of ICTs and the digital divide between adults and adolescents: encounters and (mis) encounters at school and in the home”, involving over 10 researchers from different Spanish universities, and led by Jordi Busquet. The AUSTICA research team is made up of Daniel Aranda (UOC), Sue Aran (URL), José Antonio Gabelas (University of Zaragoza), Manuel Garrido (Universidad de Sevilla), Alfonso Medina (URL), Rosa-Àuria Munté (URL), Silvia Morón (URL), Alejandra Perales (URJC), Pedro Beinares (URJC), Laura Ruano (UOC), Sonia Ballano (URL), Ismael Pereaça (URL) and Ana Cintínya Uribe (URL). These results are included within the qualitative study phase and have been obtained through focus groups during a stage of the research project supervised by Silvia Morón Sompolinski.
In other words, a user who is immersed in online processes and whose commitment level tends to increase in tandem with these processes.

Based on Hart’s theoretical approach to Internet usage and on the transcriptions of 30 focus groups about the issue of a supposed generational digital divide, we have carried out an analysis of the perceptions of young people and adults regarding the profile of so-called digital natives (young people) and their skills and competencies in the digital environment in comparison with those known as digital immigrants (their parents and teachers). In this respect, we consider that an understanding of how young users perceive themselves and how they are perceived by the adults closest to them (parents and teachers) might be of great use in the study of the generational digital divide and in a rigorous critical approach to a social issue and phenomenon of major significance.

3. Results

Young people perceive that they use practically the whole range of technology which is at their disposal. They are aware that they do not know certain contents, services, programs or platforms which are of no interest to them, but they seem totally convinced of their ability to learn them should the need arise. They recognize that, as young people, they approach technology with curiosity and interest, while some of their adult relatives appear to be afraid, to distrust or to reject new technological devices (from computers or tablets to latest-generation mobile phones).

All of the young people consulted perceive that their use of technology is mainly oriented towards sociability and leisure. On the other hand, they also agree that their adult relatives who are “tech-savvy” tend to use technology primarily for issues related to their work or professional environment while, in many cases, requiring help to use technology in leisure or social contexts. These results—validated in the adult focus groups—are consistent with those obtained in similar research, in both a national context (Observatorio de la Infancia en Andalucía, 2010) and an international context (Ito et al., 2008). These nuances concerning the different ways in which technologies are used reaffirm the relational nature that Information and Communication Technologies are acquiring (Gabelas, Marta & Aranda, 2012). They also demonstrate the wide range of possibilities for an exchange of skills and knowledge between young people and adults through a less restrictive conception of the processes and environments of learning, negotiation and acquisition of knowledge.

While it is true that young people identify, recognise and value the skills of their parents and teachers when they are particularly competent at using technology, they are also impatient and critical of the technological difficulties displayed by less competent adults. Regarding their family members, they are clearly understanding, often expressing criticism with a degree of affection. In the case of teachers, however, their criticism is direct and forceful, often accompanied by a clear perception of loss of authority on the teacher’s part. In these cases, there is a mixture of confusion, bewilderment, impatience and mockery regarding the lack of knowledge of those responsible for teaching them at school. It should be kept in mind that while adult relatives are those who facilitate their access to technological devices in the home, managing and negotiating the conditions of access and use, teachers often represent the restrictions and bans of these same devices which are so commonplace in most schools.

Young people perceive that they mainly learn alone, intuitively, or through collaboration with their peers. They rarely turn to adults when they require assistance with technological matters, as demonstrated in other research (Aparici et al., 2010; Ballano, 2012). It is interesting to note that these learning processes are carried out in leisure contexts, often motivated by individual interests, or as a result of participation in social capital networks, which is consistent with the results of many other research studies and analyses.
Some of the results obtained through the focus groups show, as did the contributions of Mimi Ito (2008), Danah Boyd (2008), Zeynep Tufekci (2008) and Deanna Zandt (2010), that new technologies, and social networks in particular, are used by young people for three principal aspects: firstly, as the result of Internet surfing which might be considered erratic (“enter to see what there is”); secondly, to establish and maintain a wide range of social relations; and thirdly, to establish closer personal relationships based on spaces of mutual recognition and trust which often enable different relationship hierarchies and categories to be set up. For these young people the virtual environment is, in short, part of their day-to-day reality and in virtual space, as in physical space, they clearly demonstrate multi-tasking skills.

Despite the fact that research into new literacies clearly shows that young people acquire, intuitively and through their socialization and leisure spaces, skills and competencies which may have an impact on their professional future (Jenkins, 2008; Rheingold, 2004; Boschma, 2008), they tend to think – as do their parents and teachers on occasion – that those activities carried out in their digital leisure contexts are actually a waste of time (Ballano, 2012). Generally speaking, only those aspects related to the instrumental mastery of certain devices or technological programs are, on occasion, considered exceptions to this way of thinking.

In this context, and following the categories established by Jane Hart, it is interesting to see how young people characterise their own use of social networks. Analysis of the focus groups reveals a tendency for young people to describe themselves as readers and participants who, while living constantly online, do not make any significant contributions. In no way do they view themselves as creators of digital content at the service of the social network. While their parents and teachers often ascribe this role to them, most of the young people consulted perceive themselves as active contributors (participants) in social networks or on Internet in general, but only very occasionally do they identify themselves as “creators”, as many of the spaces they frequent are not of their own creation. Even those who state that they have their own blog or video channel (and these are definitely in the minority) consider their activity to be part of a “conversation” with their peers and not an act of online content creation. However, while in the minority, some young people claim to be and perceive themselves as being very active real online creators. Their peers also recognize them as such and claim that such levels of skill and knowledge of Internet use can result in social recognition and prestige among young people, and even in a feeling of “superiority” among the most skilled.

This self-image contrasts sharply with the perception of young people held by many of the adults consulted, although significant differences can be observed between teachers and family members. While there is a general perception that young people are skilled at using almost the whole range of technology available to them, parents in particular focus their discourse on this supposed profile of online mastery and creation. Adult family members with the lowest levels of digital competence tend to demonstrate magical thinking and mythologize their children’s competencies. In this regard, the charismatic ideology that adolescents were born with a special gift and have an innate ability to learn how to use new technologies is revealed (Bourdieu, 1988). On the other hand, teachers tend to qualify these claims, stressing young people’s weaknesses regarding safe, “ethical” and productive use of ICTs. Thus, while most of the adults consulted (above all, those least-skilled in digital environments) view their children as creators, teachers see young people as skilled at the instrumental use but weak at applying critical thinking when discriminating between sources of information and the ethical usage of these sources (cut and paste, for example). Similarly, while they consider them to be creative in academic activities such as presentations and videos, many of the teachers consulted doubt students’ ability to
judiciously select information sources and to recognize and respect the intellectual property of others.

As far as their own knowledge of the digital environment is concerned, parents frequently acknowledge having learned with the help of their children, which further increases their perception of the young as native “experts”. However, they also highlight the lack of tolerance shown by their “instructors”, who are more interested in solving the technological problem than in explaining its functioning in a more educational way. In this way, those adults who previously had little or no contact with new technologies have increased this contact in parallel with the knowledge of their children or out of family necessity. They admire the abilities of their children related to new technologies, and they frequently receive assistance from them.

It is possible to identify a group of less knowledgeable adults, who might be classified as digital illiterates: they have had no training in technology and do not feel interested enough or able to acquire any, as they perceive no need to do so. This group, small in number, goes beyond perceiving their children as creative. In fact, they appear to apply a certain “magical thinking” to the technological knowledge of these young people. They think that they know a great deal, although they do not know how their children actually use technology. This places them in a situation of greater tension, as they realize that they can neither help them nor control their usage. In these cases, a more negative, even fatalistic, discourse can be identified concerning the effects that the use of technology may have on education and on society in general.

In short, adults’ perception of the knowledge of their children or pupils depends on their own knowledge: those who are most adept at using technology themselves see young people as agile, confident and quick learners; they exchange knowledge with them; they alert them to risks and, in many cases, they ask for help. They value young people’s knowhow but also question their criteria concerning the credibility of information, interlocutors, sources, personal integrity, and so on. On a continuum, those adults who have had the least contact with technology are those who find it most difficult to deal with and have most concerns. They confer all the power regarding this aspect of their relationship on the young people in their lives and they display certain fears, being unable to understand or explain the forms of conduct which develop in this environment.

4. Conclusions

On analysing generational differences in Internet use from a technological perspective, it becomes clear that certain theoretical intuitions are gradually dismantled to give way to more complex realities. While Prensky (2001, 2006) had already posited that the categories of digital “natives” and “immigrants” were limited in scope and could give rise to a great deal of questioning and qualification, field studies such as this clearly show the contradictions of such categorization. It is less a case of whether young natives know more or less than their immigrant parents or teachers than of the differences apparent in their appropriation and use of digital environments. In fact, the problem with Prensky’s label is that it is also based on a distinction that is generational in nature, even though the aspect that characterizes the second stage of the divide seems to be more related to quality of use (Busquet et al., 2012).

In other words, those who learned to use the tools later and have a need or an interest in including them in all aspects of their day-to-day life will no doubt use the tools in a more complex way than those who, despite facing no instrumental barriers, do not have the motivation or the necessary resources to make any significant contribution in the digital environment. In this regard, Hart’s typology is useful as it stresses the type of appropriation and usage of digital environments rather than using categories determined by age or by the
generation to which young people belong. Consequently, one conclusion which might seem obvious but which, due to these types of labels (native and immigrant) is always significant is that youth, like childhood, is not a biologically determined category but a socially constructed one. Therefore, there is no single profile of a digital native, because having been born in a digital context in no way determines a single model of appropriation and use.

It can be deduced from the study carried out that the great majority of the young people consulted consider that the technological tools available to them are in fact channels of participation rather than of creation. In this regard, while young people are not necessarily more skilled than their parents or teachers at creating new materials, their activity as participants can certainly be considered, in many cases, more sophisticated than that of adults as a homogenous group. Among the main reasons which support this statement, the fact that social networks are not a new environment for them stands out; the activities of sharing and connecting are, in this case, habitual and clearly consolidated.

While there still exists among the adults a group which can clearly be defined as “readers” – due more to socio-cultural factors than to generational differences – the great majority of young people consider that they use Internet and social networks as participants and that these are a fundamental part of communication in their everyday lives. This is why some researchers emphasise the need to question other labels too, those that identify these technologies as characteristic of communication and information, revealing the relational nature that ICTs are progressively acquiring. (Gabelas, Marta & Aranda, 2012).

Hart’s categorization continues to serve as a means of approaching the intergenerational digital divide and, therefore, the type of use made of the tools typical of the digital environment. In this regard, two points which we believe should be highlighted can be deduced from the study; firstly, there is no single profile of a digital native; and secondly, the most advanced stage of the digital divide, the stage related to quality and nuances in appropriation and usage, takes us beyond merely distinguishing between so-called digital natives and digital immigrants. The focus groups reveal that both the young people consulted and their close adult figures (teachers and parents) perceive a digital divide even between members of the youngest generation: between older and younger siblings; between those with and without access to latest-generation mobile phones with Internet connection; between those who belong to social networks and those who do not, etc. The digital divide is a very complex, dynamic reality in constant evolution. Consequently, digital divides and the question of the generational factor are areas of study which still require joint efforts for research, discussion and problematisation.

As a point for further reflection and discussion, the problematisation of or qualitative research into how we move from one stage of Hart’s taxonomy to another is still pending. In this respect, we now wonder whether many of those adults who are currently only observers will go on to perceive themselves as creators with greater ease than their own children, who might remain (or continue to perceive themselves) as participants. The role of creative user is assigned not only because of the theoretical possibility of being so, but also because of a willingness to become involved in the creation and signification processes of digital information, communication and relation contexts. Consequently, possessing a certain technical skill in dealing with digital environments will not turn young people or adults into creators, nor will it make them perceive themselves as such. The facility and intuition shown by young people regarding technology is only a victory at an instrumental level; it will not necessarily have an effect on the quality of the appropriation or on the role they adopt with their usage. The complexity of the contents they (both adults and young people) deal with through Internet, whether as participants or creators, requires mutual accompaniment. In this regard, the generational cultural (and digital) gap is a challenge, but also an opportunity for collaboration and negotiation of spaces, environments and meanings.
References


