

# Promoting digital competences for the enjoyment of culture: new literacy challenges

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## ABSTRACT

Digital technologies and the Internet have become an integral part of our everyday lives and have meant that we find ourselves immersed in a digital culture where knowledge is online. This article examines the impact of the development of the digital age on culture and education, two directly related social spheres that have seen the emergence of several social and digital divisions. Not everybody is able to access and enjoy online culture, so promoting appropriate training in the use of the tools needed in a digital society is indispensable. On the basis of a review of literature on the subject by leading researchers in the areas of culture and education, we conclude that the enjoyment of digital culture entails a radical change of perspective, which doubtless involves adapting the current education system.

### Keywords:

Digital culture  
ICT  
Competences  
Internet  
Education

## Introduction

The worldwide spread of information and communication technology (ICT), combined with the boost in Internet infrastructure, has led to the transformation of most areas of human activity. This article looks into what this transition to the digital entails in two specific domains: culture, in terms of the complex whole (Tylor, 1871) and education, the foundation of society's progress. They are two social spheres that have a direct, one-way relationship and, with the digital and information age in constant evolution, are undergoing a time of change and transformation.

What is now known as the "digital world" (Negroponte, 1995), "third environment" (Echeverría, 1999), "cyberculture" (Lévy, 2007), "network society" (Castells, 2001) or "digital culture" (Gere, 2002) has challenged the traditional way of understanding culture (Uzelac, 2010), giving rise to new approaches and paradigms adapted to the new, worldwide social structure in which we live. This social and cultural change has therefore inevitably led to the redefining of education, which currently faces new challenges, opportunities and threats. Today, information and knowledge are online and their quality is based on the connection value (Siemens, 2006). Consequently, our way of learning has changed and training centres need new teaching and learning models based on a prior change in education philosophy. An adaptation or revolution in education which, at the same time, contributes towards a change in roles among the players in charge of young people's development (teachers, students and family) and to learning ecologies being suitably adapted. In short, this is a digital age that has prompted a rethinking of the pillars of general education and education in the arts and cultural management, in particular. In this context, and by means of a review of literature by leading authors and experts in "digital culture", the aim of this article is to offer an overview of the effects of ICT in the area of culture/society, with particular emphasis on the need to rethink education and cultural policies on literacy and the promotion of digital competences for the enjoyment of contemporary online culture. So providing answers to questions such as: what is understood as "culture" in the digital age? How has culture felt the impact of technology? What paradigms are currently building the concept of culture? Are we dealing with "culture" or "digital culture"? What are the consequences for education?

This article is arranged in three broad sections. Firstly, an approximation of the contemporary definition of culture is described. Secondly, the impact of digital technologies on the cultural sector and online culture (driven by cultural and creative

industries and the democratisation of access to online culture) is analysed. Thirdly, and in the light of the aforementioned theoretical contributions, the changes education is facing with regard to promoting the necessary competences for the enjoyment of online culture are examined. Finally, and on the basis of these three sections, a conclusion is given, in the form of critical reflection on the new challenges faced by the cultural managers and educators in charge of adapting to this hyper-connected, digital age.

## Culture in the digital age

Providing an accurate definition of "culture" has always been a complex and very socially sensitive issue, and has now become a widely-used wildcard in most contexts of our reality (political, social, education, economic, etc.), this also sometimes giving rise to confusing connotations. Hence, there are countless meanings for such a multidimensional and polysemous term, although perhaps the most widely-known definition of "culture" was provided by Edgard B. Tylor (1871) in his work "The science of culture", where he defined culture as a complex whole encompassing knowledge, beliefs, art, law, customs and any other attitudes or habits acquired by a human being as a member of society. This is a broad definition that somehow tries to encompass different aspects. Nevertheless, over the course of time, two particular approaches have been the most widely-used analytic perspectives to specify the term "culture": the humanist view and the anthropological view.

From a humanist perspective, culture is understood as referring to the outcome of cultivating and refining human knowledge by exercising our intellectual faculties and, in anthropological terms, is seen as the set of lifestyles and customs, knowledge and degree of artistic, scientific and industrial development in a certain period or social group. Thus, within a social and technological context in which digital technologies and the Internet have had a global impact as an inseparable part of everyday life for millions of people, there has been a need to review and approximate the term in question. As described by the Israeli philosopher Marcelo Dascal (2006), cultural ages can be distinguished according to the communication technology used. Therefore, taking into account that the computer and web of networks are the actual symbols of the information and knowledge society (Toffler, 1980),<sup>1</sup> it is obvious that today we are talking of an online *digital culture*. The way we communicate, socialise, enjoy our leisure time, shop, make travel arrangements, see films, visit museums, see photographic exhibitions and read the

<sup>1</sup> The futurist Alvin Toffler divides the history of humanity into three large spaces that push each other aside, known as waves, where the first represents livestock farming and agricultural society, symbolised by the plough, the second is society during the industrial revolution, symbolised by the assembly line, and the third wave is the knowledge and information society, symbolised by the computer.

newspaper – in short, our way of life – has changed. And despite the fact that defining digital culture as the way of life belonging to an age based on postmodern values and networks may, a priori, seem an oversimplified and highly deterministic definition, it is not entirely inaccurate, since it is undeniable that life has become digital, and that the Internet has become an essential part of the everyday activity of countless numbers of people (Igarza, 2012).

One of the general notions that tend to be used to frame this “new” culture emerging from ICT is the term “*cyberculture*”. This is a neologism combining the word “culture” and prefix “cyber” (in relation to cybernetics and virtual reality) which is used to describe the new form of culture, that is, the new way of life in society. The sociologist Derrick de Kerckhove (1999) explains that cyberculture can be viewed from three points of view: “interactivity”, which is the relationship between the person and the digital environment defined by the hardware connecting the two; “hypertextuality”, which is interactive access to anything anywhere; or “connectivity”, which is what promotes technology via the Internet. Moreover, such aspects are rated positively by users. Nonetheless, cyberculture and digital culture are still in the process of construction, and because we are dealing with a new space of social constructionism and a phenomenon of informational, communicational, cognitive, emotional, sensorial and interactive change, human behaviour needs time. Moreover, there are several discrepancies among different expert opinions. On the one hand, there are those who take the stance that *cyberculture* is the evolution of culture, while, on the other, there are those who regard “digital culture” as a part of culture as a whole, and then there are those, as in our case, who consider that “the new culture” responds to a profound paradigm change based on the hybridisation of technology and human beings, giving rise to the start of a complete transformation in society.

We therefore consider that the contemporary definition of culture should be understood as a change in values, customs, beliefs, habits, practices and types of behaviour; individual, social and community changes which have been prompted by the unstoppable development of digital technologies. In other words, a combination of cultural expressions, technical processes, innovative working methods and communicative expressions, typical of the digital age. The dynamic concept of digital culture can thus be understood as a process of integrating and intertwining (position 3), on the one hand, the culture that is given increasing media coverage by the digital paradigm (position 1) and, on the other, the digital technologies that are intervened by traditional cultural practices (position 2). The point at which both stances cross gives rise to what we understand as our present-day cultural model – a new space supporting communicative needs, creative practices, new transmedia narrative (Jenkins, entrevistado en Scolari, 2013) and social transformations, a new context that we are unable to control and that is gradually encroaching on our daily lives (Figure 1). In the words of the Argentinean researcher Roberto Igarza:

Digital culture engages the numerous ways in which collective cultures express themselves and intermingle with one another via different modes of production, distribution and enjoyment, and whose mediatization is of a digital nature. It is, at the same time, culture intersected by the digital paradigm and digital technologies intervened by the aesthetics and narratives of traditional media culture. From this intertwining there emerges a set of new aesthetics, narratives and technologies that characterise contemporary culture (Igarza, 2012: 152).

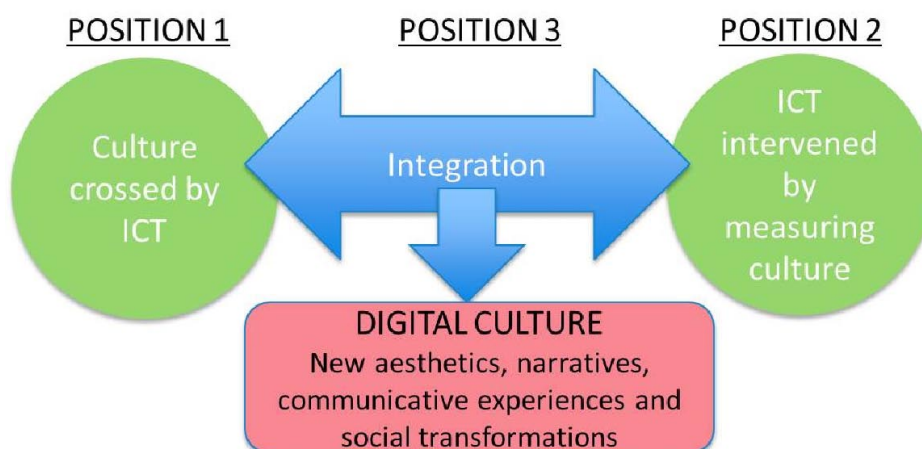


FIGURE 1. “CONTEMPORARY DEFINITION OF THE TERM “DIGITAL CULTURE”

Consequently, the boundaries between virtual and real space are not so clear anymore. Thus, virtuality, more than being unreal, is beginning to take on the meaning of a tacit aspect of material reality (Hawk & Rieder, 2008). Ambient intelligence, ubiquitous computing and the Internet of Things have recently entered the debate on digital culture, indicating that culture and digital culture evolve and increasingly interact as they frame our experiences, which are increasingly close to one another (Uzelac, 2010). Culture is life, and is therefore dynamic, and is in a process of constant movement and transformation.

Ultimately, and regardless of the denomination used to define present-day culture, the truth is that we live surrounded by technology and immersed in virtual realities. Therefore, the important thing is for everyone to have access and enjoy it. Access to information and online culture cannot be for the privileged few and, indeed, the Internet's greatest challenge is that this should become a social right. This article vindicates the central role of education in order to achieve this, which is why we have based ourselves on the opinions of researchers who concentrate on promoting education adapted to the needs of the 21<sup>st</sup> century. Authors such as Prensky (2010), Piscitelli (2009), Gardner (2005), Reig (2012) or Cobo and Moravec (2011), among others, claim that there is a need for urgent changes and transformations in education and schools, which will be described below, if the objective is for students to be ready to cope within the digital context into which they were born. Previous analysis was conducted of the main impacts that digital technologies have had on the cultural sector, which are consequences of the digital age that clarify the whys and wherefores of the need to change education.

## Digital culture, online culture

Most of the changes that have occurred in present-day societies are related to the introduction of ICT into everyday life, indicating the shift towards a global digital culture. As explained by Charlie Gere<sup>2</sup> in his book *Digital Culture*, in which he states that "digitality

can be thought of as a marker of culture because it encompasses both the artefacts and the systems of signification and communication that most clearly demarcate our contemporary way of life from others" (Gere, 2002: 12). The development of increasingly more sophisticated digital technologies have contributed towards the transformation of time and space dimensions, which are constituent elements of human life and culture. So, on the one hand, localities are becoming detached from their cultural, historical and geographical significance and reintegrating into functional networks or collages of images, causing a space of flows and, on the other hand, time is being rescheduled, becoming continuous and timeless (Castells, 1997). The culture of the digital age can be defined as the culture of real virtuality, where spaces are different, but real.

Cyberspace has become a huge server housing an infinite amount of data, information and fragmented knowledge that is created, destroyed and modified due to the combined activity taking place between people via online connections (Siemens, 2006)<sup>3</sup>. Consequently, in the present day, "knowing" means being connected and constantly dynamic, and learning has gone from being thought of as a mainstream or preferably individual activity to being thought of as a continuous process of building networks established under a paradigm of online work, marked by the principle of simultaneity of access, connection speed, limitless operating capacity and clear opportunities for critical exchanges. This is culture understood as being a complex and confusing whole forms part of this digital age of information and communication, and as such, it has undergone a transformation.

Now, in what way has the cultural sector felt this digital influence?

The widespread implementation of digital innovations and globalisation of digital content has brought as many opportunities as it has disadvantages to all the cultural sector's value chain parameters. Right from creation through to production, via publishing, distribution and consumption of cultural goods and services, including the demands, uses and way in which culture is enjoyed (European Commission, 2010b), it has yielded significant benefits not only for

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<sup>2</sup> Research Director at the Institute of Cultural Research at Lancaster University.

<sup>3</sup> George Siemens is a theorist on teaching in digital society. He is the author of the article *Connectivism: a Learning Theory for the Digital Age* and the book *Knowing Knowledge*, an exploration of the impact of the changed context and characteristics of knowledge.

“THE CULTURAL CONTENT INDUSTRY HAS NOT ONLY ESTABLISHED ITSELF AS A CULTURAL ECONOMY PRODUCING CULTURAL GOODS ON A MASSIVE SCALE, BUT ALSO AS A NEW DIGITAL ECONOMY WHERE IMMATERIAL VALUE INCREASINGLY DETERMINES MATERIAL VALUE”

consumers, but also for creators and the cultural industry as a whole. One of the greatest impacts has been the transformation in the essence of classical works into large “cultural and creative industries” (CCIs, hereinafter). CCIs are helping to build new forms of recreation, experience and consumption of the cultural heritage amassed over the years (audiovisual, literary, plastic and architectural, and so on); they are also generating radically new spaces and content, spurring innovative production, demand and consumption structures. Moreover, there is their impact on the GDP, in the region of 3% in Europe; one of the CCIs’ impact indicators on the continent’s social fabric is driven by the need to develop new competences that empower new professionals. In fact, CCIs are now spearheading “smart growth” in the most competitive urban spaces in Europe. The cultural content industry is large, encompassing eight domains (artistic and monumental heritage, archives, libraries, books and press, visual arts, architecture, performing arts, audio and audiovisual media/multimedia) and six functions (preservation, creation, production, dissemination, trade/sales and education). It is a cultural industry that has not only established itself as a cultural economy producing cultural goods on a massive scale, but also as a new digital economy where immaterial value increasingly determines material value – all because consumers are looking for new and enriching experiences, regardless of the content.

In accordance with the above, the European Commission (2010a), in its Green Paper “Unlocking the potential of cultural and creative industries” makes a distinction between the notions of “culture” and “creativity”. The 2005 UNESCO Convention definition is used for cultural industries, which identifies them with those activities “producing and distributing goods or services which at the time they are developed are considered to have a specific attribute, use or purpose which embodies or conveys cultural expressions, irrespective of the commercial value they have”, thus including the traditional arts sectors (performing arts, visual arts, cultural heritage – including the public sector), film, DVD and video, television and radio, video games, new media, music, books and press. As for creative industries, they are identified as “those which use culture as an input and have

a cultural dimension, although their outputs are mainly functional”. They include architecture and design, which integrate creative elements into wider processes, as well as sub sectors such as graphic design, fashion design or advertising.

So, under this global denomination of CCIs, digitalisation can be seen in all sectors, giving rise to the establishment of a powerful digital content industry that has led to high economic growth, just as stated in the objectives of the Digital Agenda for Europe (2010). By way of example, in the publishing sector, the e-book reader has radically transformed the business model and, thanks to the creation of digital online libraries, universal accessibility to culture is being promoted. The European Initiative<sup>4</sup> is a clear example of this – a project undertaken by the European Union which has managed to digitalise 15 million archives, 50% more than the pre-determined target (ONTSI, 2012). With regard to the audiovisual sector (film, music, video games and so on), it continues to grow, and digital music now accounts for higher turnover than non-digital music. Similarly, there are increasing numbers of virtual museums and online exhibitions in the cultural heritage sector (monuments and museums). It is even possible to view historical buildings in town centres three dimensionally. While traditional culture has formed the social bond by referring to a sense of belonging to a territory, the digital paradigm in the age of globalisation has helped to “deterritorialize” cultural products (without necessarily distorting their content), creating a ubiquitous space for their knowledge, transformation and consumption. There are digital communities which are highly active mapping urban space online, assigning it new functionalities, elements and values, which are constantly updated.

In short, cyberspace has turned into the ideal environment for cultural dissemination, and the different sectors have noted the influence of ICT, the Internet and social media in some form or another. In the words of Igarza, “the Internet is the largest shop window in history, it is the expression of a way of producing, putting into circulation, sharing and consuming culture, which tends to be prevailing” (Igarza, 2012: 153). Nonetheless, it is important to stress once again that when referring

<sup>4</sup> For further information, see: <http://www.europeana.eu/>

to technological influence, we are not only focusing on the mere digitalisation of cultural and creative content and technologizing supports, but are also taking the influence of digital technologies and the Internet on culture into consideration in terms of usefulness, i.e. as tools supporting the development and dissemination of works to a wider audience and at a lower cost, irrespective of physical and geographical limitations. Creators, thanks to the digital revolution, now have the option to engage larger audiences and markets and provide them with a wider-ranging cultural offer.

Moreover, the hyper-connectivity emerging from the digital age has meant that waiting and travel times blend into a continuum of consumption, communication and portability, an increasingly sophisticated feature of technological devices (smartphones, tablets, iPods, etc.), and has made it possible for people to keep in touch with the cultural media system anytime, anywhere. Thanks to the web of networks (interactivity, hypertextuality, connectivity and ubiquity), 2.0<sup>5</sup> or social culture has become the culture that is remixed, recycled, engaging, extrovert, combined and co-creative. In short, no ends of descriptors are able to define a collectively-created culture. However, it is important to be aware of the fact that this way of viewing culture involves, in turn, very substantial (and controversial) issues in relation to the concepts of authorship or property rights. Indeed, one of the major issues affecting “free culture” online relates to copyright, i.e. the legal principles and standards protecting authors. It is for this reason that new licences such as *Creative Commons*, *Copy Left* or *Free Software* have been created in recent years, which, according to the degree of freedom granted, allow greater freedom to share information.

Nevertheless, and despite the fact that the promotion of free culture keeps on advancing, reality tells us that the development of ICT and the Internet has also given rise to the appearance of significant digital and social divisions. Because, even though the Internet has become the largest repository of cultural representations and expressions in history, it does not guarantee plurality of voices and views (Igarza, 2012). There are many persons who, for different reasons (gender, age, social and professional environment, lack of time, motivation and/or material or economic resources, expertise and skills), do not know of use or enjoy online culture and are excluded from this society articulated by networks and, for that matter, also from enjoying online culture. Hence, it is necessary to redefine education policies with regard to digital literacy. The world is digital, life is digital and culture is digital, and so education, as it is influenced by constant cultural changes, must redesign itself and adapt to the new skills required by the evolution of

society. Ultimately, digital inclusion is not restricted by the availability of resources enabling online access to be gained, but by the ability of people to make effective use of them, and hence the need to rethink education.

## Rethinking education: new challenges

Traditionally, the main functions of education have been to pass down the culture belonging to a society to new generations and prepare them so that they can get along well in the society they are born into. For this reason, in the midst of a transition to a digital culture where technological tools and cyberspace take centre stage in our daily habits, analysing the effects of ICT and the Internet on education and looking at the changes and competences needed to encourage the use and enjoyment of technology have become a very hot topic. Culture is at stake in the sphere of education and, in recent years, education has undergone significant transformations driven chiefly by the technologization of classrooms and life. Formal education (school) has been unable to ignore the influence of the digital environment; it is, therefore, also now a sector going through a period of transition. Now, in what ways have digital technologies influenced education? What changes are necessary? What is the impact of this on the enjoyment of online culture?

The first of the major transformations caused by the information and knowledge age has been a radical change in learning. The amount of data<sup>6</sup> the Internet houses is so vast that practically anytime anywhere, and by means of a simple click, it is possible to access all kinds of information. The traditional way of learning has therefore changed. Learning is no longer seen as an activity restricted to school settings since it went online, and that is why it is now understood (or should be understood) as a process that is disorderly, hazy, informal, chaotic, continuous, digital, lifelong and based on the power of online connections. Hence, “connectivism”<sup>7</sup>, based on connectivity, has established itself as the learning theory most suited to the digital age (Siemens, 2006). It is a theory which promotes new teaching and learning approaches that encourage us to forget the institutionalised education systems in place until now, where knowledge resides only in the figure of the teacher. It has a theoretical basis that proposes the implementation of innovative education paradigms adapted to current needs which, broadly speaking, are based on the idea of promoting teaching and learning that is experiential, active, ubiquitous,

<sup>5</sup> The term Web 2.0 is closely associated with Tim O’Reilly, who, through this notion, sought to describe the websites that allow users to interact, share, collaborate and create, as opposed to static 1.0 websites, which only allow users to passively look at the content created for them.

flexible, integral, and reflexive, with no gaps in time or space and centred on the person. These are changes affecting the way of teaching and learning, but not the syllabus. Proposals such as “Invisible Learning” (Cobo and Moravec, 2011), “Expanded Education” (Zemos98, 2012), the “Edupunk” movement (Kamenetz, 2010) and “Pedagogy of Partnering” (Prensky, 2010) form part of participative pedagogical frameworks and are based on the learner’s own motivation and curiosity. Nonetheless, the successful implementation of these new ways of “teaching” and “learning” depends on a series of previous transformations in aspects that directly influence the promotion of quality education. In other words, a redefinition of the role of teachers and students, methodological renovation and the restructuring of classrooms is necessary – or to put it another way: a rethinking of education in its entirety.

First of all, the role of the teacher needs to change completely. Already today, “the teacher-centred model of education as conveyor of standardised knowledge to a ‘mass’ of students (a model similar to that of ‘mass media’) no longer makes sense” (Tapscott, 2009), and that is why teachers have to take on the role of organiser, guide, generator, companion, coach, learning manager, adviser, tutor, catalyst or consultant of students. There is indeed abundant information and knowledge on the Internet, but detecting what is truly important, guiding the search processes, analysing the information found, selecting the information actually needed, interpreting the data, synthesising the content and disseminating it are precisely some of the tasks the teacher should guide students through. Ultimately, digital natives’ handling and grasp of technology do not in any way indicate that they use technological tools properly, usefully or beneficially for their personal development and learning even though their use brings them significant benefits such as fun, relaxation and entertainment. This is therefore the aspect that the 21<sup>st</sup> century teacher must have an impact on.

Similarly, students must also adapt to this new way of learning and change the idea of ICT and the Internet as mere recreational tools. According to the idea put forward by the researcher Marc Prensky (2010), students born amidst screens should adopt five different roles in order to cope successfully with

present-day society. Firstly, the role of researcher, i.e. students should cope with the abundance of information and develop skills that allow them to find, assess, synthesise, present and discern what is true or not among the information; they should also become experts in technology, i.e. students should be digitally competent and should therefore know how to work in a team (peers-guides-pupils), where everyone learns from and teaches each other. Students should also act as true thinkers, despite having all the knowledge just a click away, because using it creatively depends, to a certain extent, on the skills they develop in order to assimilate and reflect upon it and to think critically and logically. Moreover, students should adopt the role of agents of social change, they must be aware of the enormous power technology brings – power that needs to know how to be handled and

used properly at a personal, social and community level. Finally, students should be their own teachers, feel free and know how to value their progress, mistakes and achievements.

Furthermore, and in keeping with these changes to teaching methods and assigned roles, we now find that the evaluation systems need to be accommodated. Although grades based on tests and examinations continue to be officially valid parameters, experts stress that there several different assessment models in keeping with education in the digital age. One of the options is peer assessment, i.e. showing the work done to other students. Another option that has also been proposed is to use an “e-portfolio” (digital portfolio), i.e. compiling the entire student’s work into a single report, along with their reflections and experiences. In this way, the student’s own learning process and achievements

become apparent. The third assessment proposal put forward is the “e-rubric”, a tool offering students information on the competences expected of them, with “indicators” or evidence that inform them of what they have to do in order to gain such competences (Cebrián, Raposo, & Accino, 2007).

And finally, of course, the traditional physical layout of classrooms, arranged in such a way as to give a one-way presentation from teacher to student, is hardly conducive to encouraging learning that is active, experimental, open and collaborative. “A transformation in the architecture of schools into open, transparent spaces needs to take place, where

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<sup>6</sup> “Infocification” is the term attributed to the excess of information to which we are submitted as a result of the online information age.

<sup>7</sup> For further information, see: <http://www.connectivism.ca/>

they are more like lounges than stale classrooms with desks” (Siemens, 2006: XIV). Knowledge should be shared in an appropriate environment or ecology – ecologies that enable the sharing of connected knowledge and allow students to connect, express themselves, discuss, converse, search for stored knowledge, learn in a unstructured way, transmit new information and knowledge and nurture ideas, try new approaches, prepare themselves for new challenges and take control of processes.

To sum up, the development of a digital culture, and for that matter, education adapted to present-day needs, calls for major, fundamental transformations beforehand (methodologies, roles, assessment systems, structures etc.), not to mention the mere technological upgrading of classrooms or digitalisation of content. Schools should transmit the culture of a society; and the above-mentioned proposals describe the changes that need to be made in order to get this transformation/revolution in education underway. What is more, the second task set out for the education system focuses on preparing students to get along in society but, is this aspect being worked on? Are new generations being trained to be competent within this social context? Which competences should be taught from the more formal fields of learning? And even more importantly, what does being competent mean in the digital age? And ultimately, what does being competent involve in relation to the enjoyment of culture?

In general terms, being competent<sup>8</sup> involves “know-how”, i.e. having hands-on knowledge within different social contexts. It also involves being able to integrate knowledge, procedures and attitudes and renew previously gained knowledge in order to “know how” throughout life. Thus, are students competent after completing their studies? Are they capable of mobilising a range of cognitive resources and dealing with all kinds of situations? Are they capable of addressing the problems they will face throughout their lives? In the case of Spain, the reality is that, at best, students leaving school are “wise” and possess a large amount of stored information, but that does not necessarily mean they are competent. Most have devoted themselves to memorising information

and compiling it onto a sheet of paper (exam), but outside this context, their knowledge is annulled. Therefore, in order to determine whether an individual is competent or not, those situations where the use of acquired competences makes sense should be taken into consideration, instead of using learning targets as benchmarks, which often bear no relationship to the context.

In this respect, with a digital life that is constantly evolving where culture moves online, having “digital competence” becomes an essential attribute so as to be able to make the best use of the technological resources in culture. Incorporating ICTs in the interests of culture requires a good command of their use and their new languages, but it also requires detailed consideration of aspects concerning creation, distribution and ownership of the cultural content. Hence, the European Union (DG Education and Culture, 2007) includes “digital competence” within the framework of eight key competences, which details that, on the one hand, *knowledge* of the nature, function and opportunities of ICT in everyday situations in private, social and professional life is required. This entails having sufficient hands-on knowledge of the main software applications, such as word processing, spreadsheets, databases, data storage and management, and an understanding of the opportunities and potential risks of the Internet and communication via electronic media (e-mail or network tools) for professional life, leisure, information sharing and collaborative networking, learning and research. A competent person should also have the *ability* to search, collect and process information and use it in a critical and systematic way, assessing relevance and distinguishing real from virtual. But, as well as having such knowledge and abilities, it is essential to adopt a critical and reflective *attitude* towards available information and a responsible use of the interactive media, i.e. an interest in engaging in communities and networks for cultural, social and/or professional purposes. In short, being digitally competent means having the suitable knowledge, abilities and attitudes to be able to adapt to the context, life and digital culture being experienced.

“A COMPETENT PERSON SHOULD ALSO HAVE THE *ABILITY* TO SEARCH, COLLECT AND PROCESS INFORMATION AND USE IT IN A CRITICAL AND SYSTEMATIC WAY, ASSESSING RELEVANCE AND DISTINGUISHING REAL FROM VIRTUAL.”

<sup>8</sup> European Union’s definition of the notion of “competence”: “a combination of knowledge, skills and attitudes appropriate to a particular situation. Key competences are those which support personal fulfilment, social inclusion, active citizenship and employment.” (DG Education and Culture, 2006: 13).



For this reason, by way of this article, we show the importance of linking the right to enjoy online culture with the right to be educated in digital competences. Effective training in ICT is indispensable in order for individuals to act as proactive citizens. The Internet has become a participative virtual space where the users and consumers of cultural content not only consume information, but also create and modify it. That is why digital technologies bring new opportunities to the cultural sector that should be taken advantage of. Nevertheless, the first step is to train people in the use of ICT. The digital divide in access is gradually closing and, according to data from Internet World Stats (30<sup>th</sup> June 2012), there are some 2,405 million Internet users worldwide, which translates into nearly 35% of total world population that have access to a connection. Nonetheless, the challenge of promoting digital competences continues to exist.

## Conclusion

Inevitably, the changes occurring in society have an impact on a country's culture and education. The digital age has led to a major transformation on a planetary scale and its effects are notable in global terms. Digital culture represents an anthropological short circuit that involves reviewing the foundations of the concept "culture" in all its forms, symbolic, civic and economic (Gil, 2004). Digital technologies and the Internet have become an inseparable component of life and, considering that "we remake our culture as we remake our tools" (Kelly, 2010), it seems necessary to examine the countless consequences of this new social paradigm based on connections. "Cyberculture" is the new culture of the 21<sup>st</sup> century, a culture connected to a digital society, a hyper-connected society embodied in the Internet.

Still, the notion of "digital culture" continues to develop and, at the present time, continues to be a vague and ambivalent term. Nevertheless, it is considered, in this article, to be a hybrid term between traditional culture intersected by the digital age and digital technologies intervened by the media culture aesthetics and narrative. That is to say, it is thought of as a radical social change involving a set of new cultural expressions, technical processes, work methods and communicative experiences that have embraced

practically all social spheres. It is a definition of digital culture requiring a holistic conceptualisation of the phenomenon that forms part of this complex, changing and chaotic world, which has transformed life and, of course, education.

ICT and the Internet have revolutionised many aspects of education. Information and knowledge are online and, as a result, the way we learn and teach has changed. The way information is accessed and used has changed but even more so, the way it is created and transmitted. Within this new context, culture can find great opportunities and, among them, the chance to offer people the free option to act as active citizens and not merely as consumers. Nevertheless, this change of social, cultural and education philosophy is not possible without the help of governments, institutions and all those in charge of developing a society, we therefore consider the need here to launch a series of challenges that need to be addressed. Firstly, it is essential to continue promoting cultural policies that democratise the creation of and access to culture. We must continue to move forward in favour of the democratisation of the Internet and in favour of the eradication of digital access barriers due to lack of resources. The importance of proper literacy training adapted to the digital age must therefore be stressed – training that the European Commission (2010b) includes within the eight general competences of education, among which what is referred to as "digital competence" is included: a set of skills, knowledge and attitudes favouring the "promotion of digital literacy, training and inclusion" coming from formal education. A rethinking of education is ineffective without a prior change in roles (teachers and students): a rethinking of teaching and learning methods and a restructuring of classrooms.

In short, and taking advantage of the message launched in the European Parliament by the European Commissioner for Education, Culture, Multilingualism and Youth, Androulla Vassiliou, in "Rethinking Education", we conclude by placing particular emphasis on the fact that: "Europe will only resume growth by producing highly skilled workers who can contribute to innovation and entrepreneurship. Efficient investment in education and training is fundamental to this. Member States need to address the challenge of improving education and training while consolidating public finance" (Vassiliou, 2012).

"WITHIN THIS NEW CONTEXT, CULTURE CAN FIND GREAT OPPORTUNITIES AND, AMONG THEM, THE CHANCE TO OFFER PEOPLE THE FREE OPTION TO ACT AS ACTIVE CITIZENS AND NOT MERELY AS CONSUMERS."

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