Comunicar

Media Literacy in Multiple Contexts

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C O N T E N T S

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Media Literacy in Multiple Contexts

Alfabetización mediática en contextos múltiples

Media Literacy in Multiple Contexts

FOREWORD

DOSSIER (Research)

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KALEIDOSCOPE (Research)

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Submission guidelines

1. GENERAL INFORMATION

Comunicar, Scientific Journal of Media Education, is published by Grupo Comunicar Ediciones (VAT: V21116603). This established non-profit professional group, founded in 1988 in Spain, specialises in the field of media education. The journal has been in print continuously since 1994, published every six months in March and October of each year.

Contents are moderated by means of peer review, in accordance with the publication standards established in the APA (American Psychological Association) manual. Compliance with these requirements facilitates indexation in the main databases of international journals in this field, which increases the dissemination of the papers published and therefore raises the profile of the authors and their centres.

«Comunicar» is indexed in the Social Sciences Citation Index (SSCI), Journal Citation Reports (JCR), Scisearch, Scopus and over 150 databases, catalogues, search engines and international repertoires worldwide.

Each issue of the journal comes in a printed (ISSN:134-3478) and electronic format (www.comunicarjournal.com) (e-ISSN: 1988-3293), identifying each submission with a DOI (Digital Object Identifier System).

2. SCOPE AND POLICY

2.1. Subject Matter: Fundamentally, research papers related to communication and education, and especially the intersection between the two fields: media education, educational media and resources, educational technology, IT and electronic resources, audiovisual, technologies... Reports, studies and experiments relating to these subjects are also accepted.

2.2. Contributions: «Comunicar» publishes research results, studies, experiments and bibliographic reviews especially in relation to Latin America and Europe and regarding the convergence between education and communication, preferably written in Spanish although submissions are also accepted in English. The contributions to this journal may be: Research papers: Between 4,500 and 6,000 words of text (including references), Reports, studies and experiments: Between 3,500 and 5,000 words of text (references included), and Reviews (500/550 words).

Unsolicited manuscripts sent in by authors are initially placed in the Miscellaneous section of the journal. The Topics section is organized by an editor through a system of Call for Paper and specific commissions to experts in the field. If we receive manuscripts within the deadline for a particular topic, the journal editor can pass on the manuscript to the Topics editor for assessment and possible publication in this monographic section. The deadline for each Topic section is at least nine months before publication.

3. EDITORIAL PROCESS

«Comunicar» confirms receipt of all articles submitted by authors and keeps the authors informed of the process of acceptance/rejection, as well as the editing process, in the event of acceptance. The webpage www.comunicarjournal.com also provides information about manuscript editing procedures, full guidelines for publication, as well as the Annexes: review protocol prior to submission, manuscript structure protocol, external review protocol…

In general, once the external reports have been seen, the criteria that justify the editors' decision to accept or reject submissions are as follows: a) Topical and new. b) Relevance: applicability of the results to the resolution of specific problems. c) Originality: valuable information, repetition of known results. d) Significance: advancement of scientific knowledge. e) Reliability and scientific validity: verified methodological quality. f) Organisation (logical coherence and material presentation). g) Presentation: good written style.

4. PRESENTATION AND STRUCTURE OF ORIGINAL PAPERS

Manuscripts must be sent exclusively through the journal management centre (http://recyt.fecyt.es/index.php/comunicar/index). These publication guidelines are based on the standards of the American Psychological Association (APA): (http://books.apa.org/books.cfm?id=4200061&toc=yes).

Structure: The following three files must be sent together: cover letter, title page and manuscript (main text): 1) Cover Letter; 2) Title Page and 3) Manuscript.

5. ETHICAL COMMITMENT AND RESPONSIBILITIES

Each author must submit a statement of authorship and text originality. Previously published material will not be accepted. The covering letter must specify the transfer of copyright ownership of the manuscript for its publication in «Comunicar».

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Editorial

United Nations aiming at Media Literacy Education

Apuesta de la ONU por una educación y alfabetización mediáticas

Dr. J. Ignacio Aguaded
Editor

International organizations involvement is essential to promote global policies and rise awareness among governments and citizens. There is a growing need for a critical, active and plural education towards the media regardless of age, ethnic, sex, religion or origin. From Siberia to the Patagonia, from Lapland to the Horn of Africa, media content is consumed all over the world. As Antoine Vallet stated decades ago, the air we breath is composed by oxygen, nitrogen and why not, also adverts and media messages. Internet, computers, films, videogames, TV, tablets and smartphones. The media content divide our knowledge into direct vital experiences and indirect media experiences, which become also vital indeed.

The department for «Media Literacy» in the Alliance of Civilizations (UN) set up a website (www.aocmedialiteracy.org) where resources and open sources are available for citizens of the world in English, Arabic and Spanish. There is also available a database in more than 60 languages of the five continents.

This participative website is aimed at sharing resources among people interested in media education. It is divided in many sections. Among them: «Education and media literacy» (sharing information, links, resources, organizations and events with key words), «Media education policy» (information on media education, links to organizations, resources and useful events for policy makers, teachers, researchers and students). Another interesting section is «Youth media» and especially «Plural+», which refers to a video festival organized by the AoC dealing with migration, diversity and identity issues, using material produced by young people and shared by them, creating important cultural and generational ties.

The «Magazine» section includes news and reports on the main topics (media literacy, media education policy, youth media...). There is also a forum available to share ideas.

The Alliance of Civilizations has undoubtedly stimulated the implication of the UN on this topic, as other organizations did in other fields (European Parliament, European Commission, UNESCO). As a result of this cooperative work, there appeared in 2009 a document called «Mapping Media Education in the World», with the special co-edition of Grupo Comunicar (English version: www.unaoc.org/images//mapping_media_education_book_final_version.pdf). This collaboration is still present today, and we are working on a new media curriculum for teachers: «New Curriculum for Teachers on Media and Information

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Literacy» (http://unesdoc.unesco.org/images/0019/001929/192971e.pdf), translated into French, English, Spanish, Arabic and Indonesian. This will be the main topic of the next monographic issue of Comunicar, with the contribution for experts of the five continents.

This project is supported from organizations of the five continents. In Europe: United Kingdom (Centre for the Study of Children, Youth and Media of the University of London), Sweden (World Summit on Media for Children and Youth, Nordicom, The International Clearinghouse on Children, Youth & Media, Göteborg University), Austria (Salzburg Academy on Media & Global Change), Greece (Hellenic Audiovisual Institute), Portugal (University of Algarve; Lisbon Internet and Networks Institute), Finland (Finnish Society on Media Education), Serbia (Media Education Center), Malta (University of Malta), Russia: Taganrog State Pedagogical Institute; Russian Association for Film & Media Education), Spain: Grupo Comunicar, Observatorio Europeo de la Televisión Infantil; Interactive Media Lab de la Universidad de Barcelona; Gabinete de Comunicación y Educación de la Universidad Autónoma de Barcelona; Asociación Universitaria Carlos III, Consell de l'Audiovisual de Catalunya. In America: USA (The National Telemedia Council, Media Education Lab of Temple University; University of Texas; International Center for Media & the Public Agenda, University of Maryland), Chile (Consejo Nacional de Televisión), Canada (Youth Media & Communication Initiative; Media Education Project). Africa: Egypt (Mentor International Media Education Association de la Universidad de El Cairo), South Africa (University of Cape Town). Oceania: New Zealand (National Association of Media Educators); Asia: China: University of Hong Kong; Middle East: Israel (Oranim Academic College for Education), Turkey (School of Communications, Istanbul Bilgi University), Palestine (Institute of Modern Media, Al-Quds University). And there are also other international organizations working in Europe, such as the EAVI (European Association for Viewers Interests) and UNESCO (Information & Media Literacy).
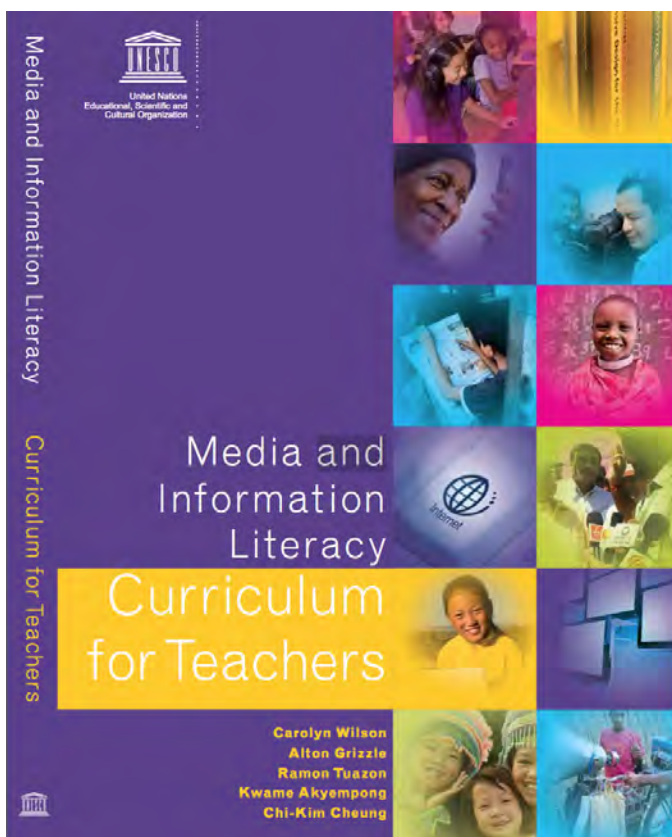
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Special

Media Literacy
in Multiple Contexts

Introduction

Media Literacy in Multiple Contexts

Dr. Alfonso Gutiérrez Martín
(University of Valladolid, Spain)

Kathleen Tyner
University of Texas (Austin, USA)

Media literacy education seeks to integrate the various texts and contexts for critical media analysis and production into the culture of schooling. It expands the concept of alphabetic literacy and orality to include a wide variety of visual, moving image, simulated and digital forms. In the process, media education conceptualizes new forms of media within the historical, cultural, social, economic and environmental contexts of traditional literacies. The routine, daily uses of digital devices shape human communication in a symbiotic relationship between form, content and context. As networked devices expand communication to a vast international audience, the mastery of contemporary literacy skills becomes increasingly complex.

This volume of «Comunicar» explores the global adoption of networked, digital literacy practices across geographic, cultural and social borders. The research here provides diverse examples of media education in a wide range of learning environments around the world. In the process themes and patterns related to the global reach of new literacy and communication practices emerge.

In particular, the studies in this volume imply that a sophisticated level of insight and experience is needed to understand the nuances of cross-cultural media texts and dialogues in a highly mobile and globally –connected world. The concept of cultural competency– the rich, diverse and complex strategies needed to communicate with global cultures and to transcend cultural boundaries – is a theme that surfaces throughout this volume.

The changing relationship between critical media reception and production is another thread that emerges in these studies. As explored here, the relationship between the skills and knowledge that are necessary to master both critical media analysis and critical media production are not entirely clear and direct. This disjunction can create problems for educators who hope to integrate new forms of «reading» and «writing» into the classroom. Fortunately, the articles open opportunities for educators to apply and integrate the findings and reflections found here to innovative media literacy education in both formal and informal learning environments.

It can be argued that research related to the integration and impact of new media literacy practices in the formal learning environment is still undertheorized and provisional. As a result, research about media literacy is often represented by small samples, cases or field tests that focus on the uses of specific devices and their relationship to learning. In the process, the research also reveals creative ethnographic research processes such as action research that aligns with the participatory practices of youth media production while testing a range of methodologies for the study of new media and education. The

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articles in this volume reflect the range of methods used to study media education. More importantly, they contribute to a growing body of research that can be used to frame international and inter-cultural digital literacy practices within the context of formal schooling.

Access to new literacy practices is increasingly seen as a basic human right and a necessary condition for social and civic participation in democratic societies. In this volume, Manuel Area (University of La Laguna, Spain) and Teresa Pessoa (University of Coimbra. Portugal) propose a model for developing new lite-racies for citizenship in a digital society. The authors build their model on two main pillars: the various dimensions of literacy; and the related competences needed to participate in a digital world.

British scholars Alex Kendall and Julian McDougall (University of Birmin-gham, UK) raise important questions about the relationships between literacy, media literacy and media education. In this article, the prominent focus on «the media» is seen as a barrier to critical lite-racy practices. The authors' insights into the relationships between audiences, texts and technologies raise important questions about the pedagogical practices needed to support media education.

Alfonso Gutiérrez (University of Valladolid. Spain) and Kathleen Tyner (The University of Texas at Austin, USA) explore the role that formal education can play in addressing contemporary digital literacy skills and practices. The authors warn that reductionist interpretations of media literacy that focus on applied technical competencies with devices, hardware and software have the potential to severely limit media literacy education. They highlight the need to include a broader and deeper analysis of the social uses, attitudes, and values associated with new media tools, texts and practices.

Erin McCloskey (University of Wisconsin-Madison, USA) expands on the topic of teacher professio-nal development in her investigation of foreign language instruction in online learning communities. Her research supports theories about the way that online learning can be used to support intercultural communicative competence in contemporary teacher development programs.

Roberto Aparici (National University of Digital Education, UNED, Spain) and Marco Silva (University of the State of Río de Janeiro, Brazil) analyse the way that new media allows every citizen to become a unique media hub with the ability to collect and distribute media to audiences on a micro-to-macro level. According to the authors, this new communication ecosystem, suggests a society of communicators where everyone feeds with his or her creations and in the process, shares individual and collective knowledge.

They propose a «feed-feed» communication model based on the individual and collective construction of knowledge over the traditional «feed-back» model.

Australian scholar Michael Dezuanni (Queensland University of Technology, Brisbane) collaborates with scholar Andres Monroy-Hernandez (Massachusetts Institute of Technology, USA) to study the uses of an innovative, participatory online environment to promote intercultural collaboration and understanding. Their study of the Scratch Online Community exemplifies the ability for users in online communities to move beyond parochial cultural attitudes in order to acquire the kind of engaged cultural competency that results in authentic learning.

Guillermo Orozco (University of Guadalajara. México), Eva Navarro (Babilonische European Research Group, University of Amsterdam. Holland) and Agustín G. Matilla (University of Valladolid. Spain) analyse audience engagement with both old and new media, and the multiple, interactive processes and discourses used across languages, formats and technologies as users create and send media. They stress the need to differentiate the existing widespread consumption and connectivity from the authentic, horizontal and creative participation of the audiences.

Joan Ferrés Prats (University Pompeu Fabra. Spain) and Alejandro Piscitelli (University of Buenos Aires, Argentina) provide some criteria to guide media education in the contemporary digital communication environment. They offer a coordinated concept of the dimensions and indicators needed to define new media competence. The authors propose six major dimensions: languages; technology; reception and interaction processes; production and dissemination processes; ideology and values, and aesthetics. These dimensions inform the design of the learning environment within the context of participatory culture. It combines critical thinking with critical expression and envisions the resulting support for personal autonomy as a pathway to social and cultural participation.

In addition to general reflections on «the media», the volume also explores the conventions and practices of specific media. University of London scholars John Potter (Institute of Education) and Shakuntala Banaji (London School of Economics) focus their research on the uses of the blog as a self-reflective learning tool for students. In the process, they discover new areas of research related to online identity creation, project-based learning and student preferences for digital literacy practices in the contemporary learning environment.

The history of literacy reveals that media can be repurposed in ways that defy the original intentions of its producers. In a case study of a student-produced news story about sex trafficking, Elisabeth (Lissa) Soep, Senior Producer and Researcher Director at Youth Radio-Youth Media International in (Oakland, California, USA) reveals the way that media texts can acquire a «digital afterlife' in digital distribution networks. Her study raises important questions about the ethical and pedagogical challenges that confront media producers, audiences, practitioners and educators in the contemporary media landscape.

The articles in this volume demonstrate that in an age of ubiquitous and pervasive digital devices, literacy practices are increasingly global and mobile, altering human communication, social norms, and connecting cultures across time and distance in ways that are both subtle and profound.

● Manuel Area & Teresa Pessoa
  La Laguna (Spain) & Coimbra (Portugal)

From Solid to Liquid: New Literacies to the Cultural Changes of Web 2.0

De lo sólido a lo líquido: las nuevas alfabetizaciones ante los cambios culturales de la Web 2.0

ABSTRACT

This paper proposes a model for developing new literacies of citizenship in the digital society. Using Bauman's metaphor, we contrast the 'solid' culture of the 19th and 20th centuries to the «liquid» information culture of the 21st century in which Web 2.0 plays a fundamental role and affects many aspects of our culture. We first review the main features of Web 2.0 through six major dimensions: as a universal library, global market, as a giant hypertext jigsaw puzzle, a public space for social communities, a territory for multimedia and audiovisual expression, and as a space for multiple virtual interactive environments. In the second part, we propose an integrated theoretical model of literacy for the citizen. This model is based on two pillars: the areas or dimensions of literacy, and the competences (instrumental, cognitive-intellectual, socio-communicative, emotional and axiological) to be developed in citizens. Finally we contend that the new literacies amount to a civic right and a necessary condition for social development and a more democratic society in the 21st century.

ABSTRACT (Spanish)

En este artículo se propone un modelo de nuevas alfabetizaciones para la formación de la ciudadanía de la sociedad digital. Usando la metáfora de Bauman se hace referencia a la oposición entre la cultura «sólida» predominante en los siglos XIX y XX con la cultura de la información «líquida» en la que la Web 2.0 tiene efectos muy relevantes sobre múltiples planos de nuestra cultura actual. En un primer momento, se examinan las principales características de la Web 2.0 definiéndola en relación a seis grandes dimensiones o planos que se entrecruzan y son simultáneos: la Web 2.0 como la biblioteca universal, como mercado global, como un puzzle gigante de hipertextos, como una plaza pública de comunicación e interacción social, como un territorio de expresión multimedia y audiovisual, y como múltiples entornos virtuales interactivos. En una segunda parte, se propone un modelo teórico de la alfabetización del ciudadano ante esta cultura digital que consta de dos ejes o planos básicos: el primero referido a los ámbitos o dimensiones de la alfabetización, y el segundo a las competencias de aprendizaje (instrumentales, cognitivo-intelectuales, sociocomunicacionales, emocionales y axiológicas) a desarrollar en los sujetos. Por último, se defiende que las nuevas alfabetizaciones son un derecho de los individuos y una condición necesaria para un desarrollo social y democrático de la sociedad en el siglo XXI.

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1. Introduction: From solid culture to liquid information

The solid and the liquid is a metaphor (Bauman, 2000) that characterizes today's processes of sociocultural change propelled by the information and communication technologies (ICT) that are now everywhere. This metaphor suggests that the age in which we live –its digital culture- is an unstable flow of manufactured knowledge and information in a state of permanent change and constant transformation, and stands as a counterpoint to the mainly Western products of the 19th and 20th century in which the stability and inalterability of the physical, material and the solid predominated.

Internet, and particularly Web 2.0, has changed the traditional rules of the game that determined the production, distribution and consumption of culture. Cultural objects created in the 20th century (printed material, cinemas, vinyl records and cassettes, photographs, etc) are disappearing. The ICT have sparked or at least speeded up a far-reaching revolution in our civilization that turns on the transformation of the mechanisms of production, storage, dissemination of and access to information; on the communicative forms and flows between people; and on the expressive languages and the representation of culture and knowledge. The new age has generated new actors (Internet, the mobile phone, videogames and other digital devices) that influence us across a broad range of experiences: in leisure, personal communications, in learning and at work, etc. The digital is a liquid experience very different from solid culture's experience of consumption and acquisition, and so requires new approaches and new learning and literacy models.

(2005) described some of its important features: a platform for software services, participative architecture, cost-benefit scalability, transformations and remixes of data and their sources, software not exclusively linked to a single device, and making optimum use of collective intelligence.

From our viewpoint the Net, that is the current state of development of telecommunications and the World Wide Web known generically as Web 2.0, can be defined according to six major parameters or dimensions of production, consumption and dissemination of culture which coexist, cross over and develop alongside each other. Web 2.0 is a universal library, a global market, a giant jigsaw puzzle of hypertextually interconnected pieces, a public meeting place where people communicate and form social communities, a territory in which multimedia and audiovisual communication take precedence, and a diversity of virtual, interactive environments. The information available on the Internet is vast, multimedia, fragmented and socially constructed within technological environments. The digital is liquid, and the 21st century citizen needs new literacies that enable him to act as an independent, critical and cultured subject within cyberspace.

• The web as universal library: the overabundance of information generates «infoxication». One of the most remarkable phenomena marking the start of this
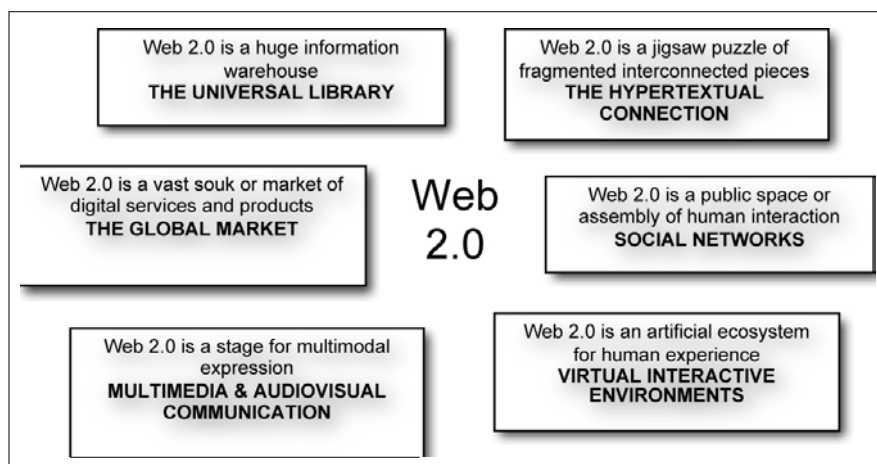
2. Web 2.0: liquid information invades our experience

Many investigators have attempted to define Web 2.0 and describe its effects on the various strands of our culture, largely identifying it as a reality that is too diffuse, changeable and unstable to fit into a tidy definition. In a seminal article on Web 2.0, O'Reilly

century is the excess of information generated by the exponential increase of that information which is amplified and massively disseminated by the many and varied media and technologies available. This has been dubbed «infoxication» (Benito-Ruiz, 2009), in that the accumulation and excess of data inevitably lead to saturation, or information intoxication, that lea-

ves the subject with a confused, unintelligible and opaque vision of reality (be it local, national or global). This is one of the cultural paradoxes of our age: we have the resources and media to access a lot of information, but the human brain's limited capacity to process it all means that our understanding of events is clouded by the excess of data we receive. Many different authors state that the information society is not necessarily better informed. One thing is to have access to data, and quite another is the ability to interpret them, make sense of them and put them to good use, that is, to transform data into knowledge, knowing how to put that information to use to suit a purpose or solve a problem. This is a crucial objective for any literate subject in the digital culture.

• The web as a market or digital souk information as the raw material of the new economy. Information is now the raw material of important sectors of the so-called new economy or digital capitalism. Online purchasing, use of public sector services, communication via Internet with companies, associations, government bodies, the daily checking and handling of our finances and other commercial activities… are habits that are now a regular part of our daily lives. Data and online service industries in their various forms are now a strategic sector in any nation's

short, brief slices individually separate but linked together for rapid consumption. Each unit or cultural object (a song, a post, a comment sent to a discussion room, a video, a text, a photo…) can be consumed by the subject and taken in isolation from the author's context, transforming its original meaning, remixing it with other pieces from other authors, enabling the subject to produce an entirely unique and individual experience for himself. Creating a webpage, a blog or a wiki seems more like collage than the production of a closed cohesive piece of work.

Web 2.0 communication is leading to an extension and consolidation of the «telegram culture» boosted by characteristics of mobile phone social interac-

> Literacy must be a process of development of an identity as a subject operating within the digital territory, characterized by the appropriation of intellectual, social and ethical competences that enable him to interact with information and transform it in a critical and emancipating form. The goal of literacy is to develop each subject's ability to act and participate in an independent, cultured and critical way in cyberspace. This is an essential universal right of all citizens of the information society.

efforts to create wealth. Web 2.0 is increasingly becoming a virtual space for financial transactions. Companies or service institutions that operate in this space need qualified personnel, workers who are literate in the competencies required to produce, manage and consume products based on data management. Equally important is enabling the client, the user and consumer of online products to become literate, aware of his rights and with a sound knowledge of how to use the Web. Media literacy means training workers of the digital industry and citizens to become responsible consumers.

• The fragmentation of culture: the triumph of microcontent. Web 2.0 culture is fragmented, like a jigsaw puzzle of microcontent in which the individual must write his own account of experiences in the digital environments. Network-driven culture consists of

tion, blogs and social networks. The epistolary culture of the past has been replaced by the economical use of the word and the urgency to get it to the intended receiver. This means that we are atrophying as subjects who manage forms of expression in the writing of long coherently argued texts that contain a start, middle and end (Carr, 2010). By contrast, most social network texts are short and spontaneous with little thought given to their elaboration. This is the triumph of communicative immediacy over intellectual reflection; the triumph of SMS writing over narrative text. Literacy must cultivate competencies in a subject so that he can control different types of language (text, audiovisual, iconic and sound) in various expressive forms (microcontent, narrations or hypertext).

• The web as a public meeting place for communication: the social networks. Web 2.0 is often refe-

rred to as the social network in the sense that it allows us to be in permanent contact with other users and so construct communities or horizontal communication groups (Flores, 2009; Aced, 2010; Haro, 2010). These networks or virtual communities, Tuenti, Hi5, NIng, Flickr, Twitter, Facebook, etc., enable any individual to interact and share information easily and directly with others and without going through an intermediary. The Internet is not only a global network of machines and tools; it is a public meeting place for exchanges between people who share the same interests, problems and outlooks. The social networks can generate strong emotional ties that come with belonging to the specific collective or social group with which we interact.

> The new age has generated new actors (Internet, the mobile phone, videogames and other digital devices) that influence us across a broad range of experiences: in leisure, personal communications, in learning and at work, etc. The digital is a liquid experience very different from solid culture's experience of consumption and acquisition, and so requires new approaches and new learning and literacy models.

The social networks not only show their potential in leisure activities and informal communication, they are also useful for professional training and education, as seen in the creation of online practical work communities. This social network duality manifests itself in many spaces that are often divergent and seemingly contradictory. They are used for political and social mobilization, as has occurred recently in North Africa and Spain. On the other hand, social networks are also a space for exhibitionists and juvenile behaviour, and it is common for certain types to use Facebook, Tuenti or Twitter to divulge their opinions, photos, songs and webpages, etc, to everyone else (supposedly their «friends»). So, literacy has to incorporate this duality in forming subjects for socialization in virtual communities and by developing communication competencies in which empathy, democratic values and cooperation are uppermost, as well as an awareness of what is public and / or private.

• The web as an expanding territory of multimedia and audiovisual expression. The web is increasingly full of images, sounds, animations, films and audiovisual material. Internet is not only a cyberspace of text and documents to be read. With Web 2.0, it is now a place to publish and communicate through photos, videoclips, presentations or any other kind of multimedia file. Iconographic audiovisual language is invading the Net's communicative processes, and this requires subjects to be literate both as consumers of this type of product and as individual broadcasters with the expressive competencies to articulate with multimedia format and audiovisual languages. An important tradition based on audiovisual education and media literacy already in place has much to contribute to these processes to create literate subjects (Gutiérrez, 2003; 2010; Aparici, 2010).

• The web as an artificial ecosystem for human experience. Internet and other digital technologies are being used to construct an artificial environment that enables users to enjoy sensory experiences in three dimensions or as a mix between the empirical and the digital, as in augmented reality (Cawood & Fiala, 2008). This technology mediates between our individual perception as subjects and the reality as represented by the technology itself, to the point where the virtual and empirical come together to generate «virtual worlds» via online platforms such as Secondlife, Torque or OpenSim (Cherbakov, 2009). These artificially constructed worlds not only create an avatar or personage that represents us but also enables us to experience intense emotions through communication and social interaction. The narrative and interactive human-machine experience that comes with videogames provides a new type of cultural experience that requires training and specific literacy skills (Sedeño, 2010).

3. New literacies for the citizen of the Web 2.0 culture

Hypertext, 3D graphics, virtual worlds, videoclips, simulations, real time and simultaneous computer-based communication between subjects, virtual human communities or social networks, video-conferencing, messaging via mobile phones or Internet, navigating the World Wide Web and multi-

media presentations are all part of a kaleidoscope of expressive codes and communicative actions that are manifestly different from communication via reading and writing on paper. For almost a decade now the literature on literacy, while acknowledging the tradition represented by Freire's liberating and dialogical approach and Dewey's focus on the democratic preparation of the citizen, as well as the contribution of critical media education, has been attempting to formulate a theory of literacy for the digital culture. Some highly influential proposals have emerged such as the concept of «multiliteracy» (Cope & Kalantzis, 2009), «new literacies» (Lankshear & Knobel, 2009) and from «Alfin» information literacy (Bawden, 2001), all of which come from the library and documentation fields. Likewise, new concepts appear that add adjectives to digital age literacy: «technological literacy», «media literacy», «digital literacy», «multimedia literacy» or «information literacy». Gutierrez (2010) states that literacy for digital technology is a more complex process than the ability to operate hardware and software. It means being literate in the new codes and communicative forms of digital culture. Several authors (Gutiérrez, 2003; Snyder, 2004; Monereo & al., 2005; Tyner, 2008; Merchant, 2009; Leahy & Dolan, 2010) have tackled this question and affirmed that the acquisition of skills for the intelligent use of new technologies requires at least an instrumental control of the same, together with the acquisition of competencies related to the search for, and the analysis, selection and communication of data and information so that the subject can transform this information into knowledge and become a «prosumer», an active producer and consumer of information, and develop competencies for communicative interaction in digital environments. The subject has the ability to appropriate and confer meaning on the dense array of information on the Net which is represented in multiple expressive languages. The appropriation of meaning and multimodal expression would be new terms for the old concepts of reading and writing that are a traditional part of producing literate citizens. Our viewpoint requires us to go further and add new elements to those already mentioned in the formulation of a theoretical proposal for the literacy to match the new cultural changes that have appeared with the development of Web 2.0.

Figure 1 shows the main lines or basic architecture of an integrated literacy model for the training of citizens in the digital society. We have combined what would be the learning environments or dimensions within the various planes or settings that represent Web 2.0, as identified in the previous section. We have also combined what would be the competencies and skills involved in the entire literacy process, such as the acquisition of instrumental, cognitive-intellectual, socio-communicative, axiological and emotional competencies. The literacy process means the fusion of learning competencies and the action dimensions or content within Web 2.0, to develop in the subject – or facilitate the construction of- a digital identity that enables the citizen to act as a person with culture and independence, with critical abilities and democratic values. Figure 1 is the representation of this integrated literacy model.

Fig. 1: AN INTEGRATED LITERACY MODEL FOR WEB 2.0

Learning environments or dimensions on Web 2.0

- Web 2.0 as a huge data and document library
- Web 2.0 as a market of services
- Web 2.0 as an interconnected microcontent puzzle
- Web 2.0 as a public space for communication
- Web 2.0 as a stage for multimedia and audiovisual expression
- Web 2.0 as an environment of virtual interactive experiences

Skills and competences to be developed in the literate subject

- Instrumental competencies
- Cognitive-intellectual competencies
- Sociocultural competencies
- Axiological competencies
- Emotional competencies

TO BE LITERATE IS TO BUILD ONESELF A DIGITAL IDENTITY AS A CULTURED, INDEPENDENT CITIZEN WITH DEMOCRATIC VALUES
Literacy is continuous learning within formal and informal learning settings with ICT

3.1. Learning environments and dimensions for Web 2.0

The first element or pillar of this literacy model refers to what a literate subject must know to be able to use the Web 2.0. Our chart identifies the six Web 2.0 dimensions mentioned previously (Universal Library, Global Market, Hypertextually linked Microcontent, Multimedia Communication, Social Networks and Virtual Environments) and describe the learning environments that each literacy plan, project or programme must provide for the digital age. These six environments or dimensions represent the «content» of literacy. A fully integrated 21st century education must instruct the citizen how to act and participate on the multiple planes that converge in Web 2.0 (table 1).

3.2. The competences in the literacy for digital cultural

The second element or pillar of this theoretical model of literacy is the identification of the subject's learning competence environments. We have tackled this problem before (Area, 2001; Area et al., 2008), identifying four competence environments: instrumental, cognitive, socio-communicative and axiological. This integral, educational and global model for literacy in the use of ICT requires the simultaneous development of five areas of competence in the subject in order to learn:

• Instrumental competence: technical control over each technology and its logical use procedures. This refers to the

acquisition of practical knowledge and skills for using hardware (set-up, installation and use of various peripheral devices and computing machines) and software or computer programs (the operative system, applications and Internet navigation and communication, etc).

• Cognitive-intellectual competence: the acquisition of specific cognitive knowledge and skills that enable the subject to search for, select, analyse, interpret and recreate the vast amount of information to which he has access through new technologies and communicate with others via digital resources. The subject learns to utilize data intelligently to be able to access information, give it meaning, analyse it critically and reconstruct it to his liking.

• Socio-communicative competence: the development of a set of skills related to the creation of various text types (hypertextual, audiovisual, iconic, three-dimensional, etc), and their dissemination in different languages, establishing fluid communication with other subjects through the technologies available. This also assumes the acquisition and development of behavioural norms with an inherently positive social attitude towards others that could take the form of collaborati-

The literacy dimensions or environments for the new cultural forms of the Web 2.0	
Learn how to use Web 2.0 as a universal library	This dimension of literacy responds to the complexity of accessing the new bibliographical sources distributed on digital databases. This aims to develop skills and competencies so that the citizen knows how to find information for a given purpose, localize it, select it, analyse it and reconstruct it. This is information literacy.
Learn how to use Web 2.0 as a market of services	This dimension of literacy refers to the critical formation of the consumer and citizen. The purchase of products or the transaction of administrative tasks online requires not only skills in acquisition and payment but also in training as a worker and consumer who is aware of his rights and responsibilities on the network.
Learn how to use Web 2.0 as a jigsaw puzzle of interconnected microcontent	This dimension of literacy aims to empower the individual to navigate the network from one document or unit of information to another, so that he is able to reinterpret and construct his own narrative of meanings based on basic units of content that are seemingly separate but on which the subject confers discourse. The subject controls the hypertextual forms of information organization both as consumer and producer of cultural messages.
Learn how to use Web 2.0 as a public space for communication in social networks	This dimension of literacy refers to the ability to play a full part in communities or interconnected social groups via telecommunication networks, and develop social behaviours based on collaboration and the exchange of information.
Learn how to use Web 2.0 as a multimedia and audiovisual expression	This dimension of literacy aims to develop the student as a subject capable of analysing and producing texts in multimedia format and audiovisual language. It proposes to instruct subjects to be critical consumers of audiovisual products and to become producers, broadcasters and disseminators of the same by using digital environments. This is multimedia and / or audiovisual literacy.
Learn how to use Web 2.0 as a territory of virtual interactive experiences	This dimension of literacy enables the subject to acquire the skills to interact within three-dimensional virtual environments of immersive, augmented or simulated reality. It requires interaction competencies, not only with the machine but also with other people in real time or offline to make intelligent decisions.

ve work, respect and empathy within the social network of choice.

• Axiological competence: referring to the awareness that ICT are not aseptic or neutral from the social viewpoint but exert a significant influence on the cultural and political environment in our society; the acquisition of ethical and democratic values engendered by the correct use of information and technology should help to avoid the diffusion of socially negative communication.

• Emotional competence: this deals with the affections, feelings and emotional sentiment aroused by the experience of acting in digital environments. These can occur during actions that take place in virtual settings, such as videogames, or during interpersonal communication in social networks. Literacy in this dimension is related to learning how to control negative emotions, with the development of empathy and the construction of a digital identity characterized by an affective-personal balance in the use of ICT.

4. Conclusion

The aim of making citizens literate is to help the subject to build a digital identity as an independent, cultured citizen with a democratic outlook on the Net. Literacy in general, and digital literacy in particular, must be treated as a sociocultural problem linked to civic education, and as one of the most important challenges for educational policy makers attempting to create equal opportunities for all in the access to culture. Education, be it in formal settings such as schools or in informal settings like libraries, youth clubs, cultural centres or associations, must not only provide equal access to technology but also instruct (make literate) citizens so that they can become cultured, responsible and critical subjects; knowledge is a necessary condition for the conscious exercise of individual freedom and democracy. Equal access and empowering critical knowledge are two facets of literacy related to the use of digital technologies. Literacy must not be taken just as a problem of formal education; it must also be applied to informal education.

The literacy of digital or liquid culture in Web 2.0 is more complex than just learning how to use social software instruments (blogs, wikis, networks and other cloud computing resources). Literacy must be a process of development of an identity as a subject operating within the digital territory, characterized by the appropriation of intellectual, social and ethical competences that enable him to interact with information and transform it in a critical and emancipating form. The goal of literacy is to develop each subject's ability to act

and participate in an independent, cultured and critical way in cyberspace. This is an essential universal right of all citizens of the information society. Without literacy, the development of social harmony in 21st century society will be impossible. Without a population with culture, that is, a citizenry without a solid cultural base, there will be no liquid society, no democratic society and no intelligent society.

References

ALEXANDER, B. (2008). Web 2.0 and Emergent Multiliteracies. *Theory Into Practice*, 47; 150-160.

APARICI, R. (Coord.) (2010). *Educomunicación: más allá del 2.0*. Barcelona: Gedisa.

AREA, M. (2001). La alfabetización en la cultura y tecnología digital: La tensión entre mercado y democracia. In AREA, M. (Coord.). *Educar en la sociedad de la información*. Bilbao: Descleé de Brouwer.

AREA, M.; GROS, B. & MARZAL, M.A. (2008). *Alfabetizaciones y tecnologías de la información y comunicación*. Madrid: Síntesis.

BAUMAN, Z. (2006). *Modernidad líquida*. Buenos Aires: Fondo de Cultura Económica.

BAWDEN, D. (2001). Information and Digital Literacies: A Review of Concepts. *Journal of Documentation*, 57, 2; 218-259. Versión castellana en *Anales de Documentación*. (www.um.es/fccd/anales/ad05/ad0521.pdf) (09-08-2011).

BENITO-RUIZ, E. (2009). Infoxication 2.0. In THOMAS, M. (Ed.). *Handbook of Research on Web 2.0 and Second*. Language Learning. Pennsylvania: IGI-InfoSci; 60-79. (http://storage.vuzit.com/public/a7l/Draft2ok_Ruiz.pdf) (08-03-2011).

CARR, N. (2010). *¿Qué está haciendo Internet con nuestras mentes superficiales?* Madrid: Taurus.

CAWOOD, S. & FIALA, M. (2008). *Augmented Reality. A Practical Guide*. O´Reilly (http://oreilly.com/catalog/9781934356036) (06-02-2011).

CHERBAKOV, L. & AL. (2009). *Virtual Spaces: Enabling Immersive Collaborative Enterprise. Part I: Introduction to the opportunities and technologies*. USA: DeveloperWorks (www.ibm.com/developerworks/webservices/library/ws-virtualspaces/index.html?S_TACT=105AGX04&S_CMP=EDU#rate) (06-04-2011).

COPE, B. & KALANTZIS, M. (2009). Multiliteracies: New Literacies, New Learning. *Pedagogies: An International Journal*, 4; 3; 164-195. (www.aab.es/aab/images/stories/Boletin/98_99/3.pdf) (09-08-2011).

FLORES, J.M. (2009). Nuevos modelos de comunicación, perfiles y tendencias en las redes sociales. *Comunicar*, 33; 73-81 (http://dx.doi.org/10.3916/c33-2009-02-007).

GUTIÉRREZ, A. (2003). *Alfabetización digital. Algo más que ratones y teclas*. Barcelona: Gedisa.

GUTIÉRREZ, A. (2010). Creación multimedia y alfabetización en la era digital. In APARICI. R. (Coord.). *Educomunicación: más allá del 2.0*. Barcelona: Gedisa.

HARO, J.J. (2010). *Redes sociales en educación*. Madrid: Anaya.

IBARROLA, S. & IRIARTE, C. (2010). *Las emociones y la mejora del proceso comunicativo en la mediación*. In Various: *En Educar para la comunicación y la cooperación social*. Pamplona: Consejo Audiovisual de Navarra. (wwww.consejoaudiovisualdenavarra.es/publicaciones/documents/sextapublicacion.pdf#page=203) (11-5-2011).

KELLNER, D. & SHARE, J. (2007). Critical Media Literacy is Not an

Option. *Learn Inquiry I*; 59-69.

LANKSHEAR, C. & KNOBEL, M. (2009). *Nuevos alfabetismos. Su práctica cotidiana y su aprendizaje en el aula*. Morata: Madrid.

LEAHY, D. & DOLAN, D. (2010). Digital Literacy: A Vital Competence for 2010? In REYNOLDS, N. & TURCSÁNYI-SZABÓ, M. (Eds.). *Key Competencies in the Knowledge Society*. Berlin: Springer, IFIP AICT 324; 210-221. (www.springerlink.com/content/b2q881452-1274838/fulltext.pdf) (01-09-2011).

MERCHANT, G. (2009). Web 2.0, New Literacies, and the Idea of Learning through Participation English Teaching. *Practice and Critique. December, 2009, 8, 3*; 107-122.

MONEREO, C. & AL. (2005). *Internet y competencias básicas. Aprender a colaborar, a comunicarse, a participar, a aprender*. Barcelona: Graó.

O'REILLY, T. (2005). *What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software*. (ww.oreilly-net.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html).

SEDEÑO, A.M. (2010). Videojuegos como dispositivos culturales: las competencias espaciales en educación. *Comunicar 34, XVII*; 183-189 (http://dx.doi.org/10.3916/C34-2010-03-18).

SNYDER, I. (Comp.) (2004). *Alfabetismos digitales. Comunicación, innovación y educación en la era electrónica*. Málaga: Aljibe.

TYNER, K. (2008). Audiencias, intertextualidad y nueva alfabetización en medios. *Comunicar, 30, XV*; 79-85.

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Critical Media Literacy after the Media

Alfabetización mediática crítica en la postmodernidad

ABSTRACT

This article questions the relationships between literacy, media literacy and media education. In the process, we connect the findings from a range of our ethnographic research and use these to propose new forms of practice for critical media literacy. By 'after the media', we do not posit a temporal shift (that 'the media' has ceased to be). Instead, we conceive of this as akin to the postmodern – a way of thinking (and teaching) that resists recourse to the idea of 'the media' as external to media literate agents in social practice. The preservation of an unhelpful set of precepts for media education hinder the project of media literacy in the same way as the idea of 'literature' imposes alienating reading practices in school. Just as the formal teaching of English has obstructed the development of critical, powerful readers by imposing an alienating and exclusive model of what it means to be a reader, so has Media Studies obscured media literacy. Despite ourselves, we have undermined the legitimation of studying popular culture as an area by starting out from the wrong place. This incomplete project requires the removal of 'the media' from its gaze. The outcomes of our research thus lead us to propose a 'pedagogy of the inexpert' as a strategy for critical media literacy.

ABSTRACT (Spanish)

En este trabajo se reflexiona sobre las relaciones entre alfabetización, alfabetización mediática y educación para los medios, relacionándolas con los hallazgos de diferentes investigaciones etnográficas, a fin de proponer nuevas formas de práctica para la alfabetización crítica en los medios. Vivimos en la postmodernidad, en la era «después de los medios» –y no es que ya no existan los medios–, sino que, por el contrario, surge una forma de pensar –y enseñar– que se resiste a la idea de considerar los medios como algo ajeno a la ciudadanía en la vida cotidiana. Para el autor, la permanencia de preceptos y prácticas anquilosadas sobre educación en los medios dificulta la puesta en marcha de proyectos de alfabetización mediática, al igual que una visión tradicionalista de la literatura genera prácticas viciadas de lectura en el aula. La enseñanza formal de la lengua ha obstaculizado el desarrollo de lectores críticos y competentes, imponiendo un modelo de lector unidimensional. Igualmente, los estudios mediáticos han ensombrecido la alfabetización en los medios, subestimando la legitimidad del estudio de la cultura popular en sí misma desde un punto de partida erróneo. La educación en medios es aun una asignatura pendiente y requiere un cambio de perspectiva. En este artículo, fruto de investigaciones, se propone una «pedagogía del inexperto» como estrategia para la alfabetización crítica en los medios.

KEYWORDS

Critical media literacy, media education, reading, pedagogy, media studies, education, media literacy.
Educación crítica, educación en medios, lectura, pedagogía, estudio de medios, educación, alfabetización mediática.

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1. Introduction: Media Literacy

The need to set one literacy apart from another can only be explained by a need to use the concepts for other reasons, that is, to strengthen the professional status of its constituencies, or to take issue with the approaches used by proponents (Tyner, 1999: 104). The convergence of findings from ethnographic research projects undertaken over the last three years provide us with some new and deeply problematic research questions related to the term «media literacy» (Bennett, Kendall and McDougall, 2011). Here, in bringing together the accumulative outcomes of this research, we propose new models of practice that embed the process of meaning-making – as opposed to the media (or its various forms of content) as central to critical media literacy.

Media literacy has never been an accepted and cohesively defined idea. The UK media regulator OFCOM offered a pragmatic definition of media literacy as consisting of three competences – accessing, communicating and creating. But Bazalgette is only one of a number of media educators who finds the term problematic. The very term «media literacy» is inherited from an outworn and discredited 20th century tactic; that of adding the term «literacy» to topics and issues in an attempt to promote them as new and essential aspects of learning (Bazalgette, cited in Murphy, 2010: 24).

If we consider that, a year after offering this critique at the European Congress of Media Education Practitioners, Bazalgette convened an international Media Literacy Conference in London, the complexity of the issue is apparent – media education practitioners use the term for pragmatic and political leverage whilst arguing for alternative semantics with one another. Bazalgette's preference is simply to return to a reframed version of literacy as opposed to a set of variants (media literacy, new literacy, digital literacy, game literacy), but –as we shall discuss– David Buckingham (2010; 2011), another leading protagonist in media education – is highly skeptical of «multimodal literacy» work. Buckingham has recently observed the declining prominence of media literacy in policy rhetoric and implementation, from the peak in attention shortly after the inception of OFCOM – a regulator charged with a neo-liberal agenda for equipping citizens with the necessary competences for responsible participation in digital media – to the current reformulation of this as «digital literacy» – a more industry-friendly version, further away from the conceptual and critical practices of media education:

There is now an urgent need to sharpen our arguments, and to focus our energies. There is a risk of media literacy being dispersed in a haze of digital technological rhetoric. There is a danger of it becoming far too vague and generalized and poorly defined – a matter of good intentions and warm feelings but very little actually getting done (Buckingham, 2010: 10).

There is a deep irony in the link between any kind of formal education and digital literacy, of course, which is simply but powerfully expressed here by Instrell who remarks that «we are all aware of the bizarre fact that the only time many learners are not connected digitally is when they are in the classroom» (2011:5). For Buckingham, three obstacles are identified as impeding a more far reaching implementation of critical media literacy, of which the move to «digital literacy» is just one. The other two are the Media Studies 2.0 intervention (Merrin, 2008; Gauntlett, 2002) which he derides as a patronizing and naïve «techno-euphoria», and the renewed interest of media educators in «the literacy brigade» from whom media educators have developed a set of approaches to a «multimodal media literacy lens» (Instrell, 2011) which Buckingham views as an over-extension of linguistics into social theory. These three developments, he suggests, have served to, in different but connected ways, undermine the potential of media literacy to be taught as a kind of critical thinking – instead, technology, textual modes and overstated claims to democratization are celebrated uncritically and the educational response to them is reduced to a set of competences and skills.

The way out of these various cul-de-sacs would appear to be a sharper focus on the objectives of critical media literacy in the twenty first century – a clearer view of what we want to achieve. It is our contention, though, that this can only be achieved if we first depart from the idea of the media itself as, fundamentally, it is this mythical construct – ignored by media educators in the «internal politics» we have described here - that has most seriously impaired our vision.

2. Contention: Looking at the media

The media, as more than merely a technical grammatical plural, is constructed out of a need to preserve a status outside of it, to maintain it as other, to be looked upon with the pedagogic gaze through judgments which - in the case of media literacy - are conservative in their preservation of the idea that there exists the media to be critical about. The media exist no more than literature exists. Both are constructions, demarcated for particular forms of pedagogic attention but neither are read critically, in Gee and Hayes' sense (2011: 63), by students.

Our argument here is not an extension of the much-contested idea of Media Studies 2.0 although we have found that intervention helpful in so much as it has asked us to re-connect media education to people and disconnect from the media. We do not subscribe to any technologically determined paradigm shift. But we do propose that new digital media has created a visible space for what was already happening in between people and media – and hence we can see more clearly now what was already, but less observably, there. Going back to the multimodal, new digital media does serve to complicate beyond repair the idea of the singular text:

Even if you don't accept the ecological metaphor, there's no doubt that our emerging information environment is more complex – in terms of numbers of participants, the density of interactions between them, and the pace of change – than anything that has gone before (Naughton, 2010: 10).

Laughey (2011) also derides Media Studies 2.0 for its over-stated technological determinism, lamenting what he sees as a move away from «critical thinking» and, in this sense, his views chime with Buckingham's. However, in seeking to offer an alternative, Laughey adopts a Leavisite «enrichment' position:

Those positive standards of quality, whether in literature, drama, music, film, television, radio, in the press or on the web remain constant. Rather than appealing to the lowest common denominator of mass appeal and sentimental melodrama, the best of popular culture captures something original and progressive about the social, political and moral attitudes of its time. That's why we will always value Hitchcock over Hammer Horror, «The Wire» over «Without a Trace», The Beatles over The Bee Gees, serious over citizen journalism. (Laughey, 2011: 16)

Laughey here reinforces the (unhelpful) binary opposition between an «uncritical» embrace of the supposedly democratizing impact of new digital / social media and this «canonical» idea of «serious» critical study. Neither, of course, are helpful. Instead, in the interests of a universal project for critical media literacy, we should be thinking reflexively about the

way that cultural products connect with peoples' construction of their selves and how media play a part in performance of identity – through affiliations and affinities that signify within language games and foster the connecting of people to one another – on or offline. A critical understanding of how we attribute meaning to cultural material, along with how we attribute meaning to ourselves – must surely be the «key competence» of media literacy.

3. Methods

The argument we present here is a summary of a convergence of a range of research outcomes, pedagogic strategies and dialogic work with texts of various kinds conducted over the last three years (Bennett, Kendall & McDougall, 2010). Our agenda is to raise a

> Despite the arguments over access, participation, technological affordances and what happens to literacy in new media environments, there is a shared desire amongst media educators to find a way of doing critical media literacy at this time, in this changing landscape. In many ways, our pedagogy of the inexpert is nothing new – we merely extend existing ideas about facilitation and the shared construction of knowledge, along with elements of «deschooling».

set of important and challenging questions for everyone concerned with media education and its current and deeply problematic variant – media literacy. The findings from three specific research interventions form the basis of our later discussion and suggestions for critical media literacy in the future. This article cannot provide substantial detail on these individual research projects, all of which are discussed in other articles, as our focus here is on the collective weight they add to our argument and how we can locate this in current discussions about the future of media literacy. However, a summary of each intervention is as follows.

More broadly, a critical discourse analysis of Subject Media (the institutional form of media education) involved a deconstruction of the assumptions at work, and their manifestation in social pedagogic prac-

tices in the teaching of the key conceptual framework for media education. To this end, each of power, genre, representation, ideology, identity, history, audience, narrative, technology and pedagogy itself were the subject of discourse analysis, in response to which a series of strategies for dealing with (or dispensing with) each concept «after the media» were proposed (Bennett, Kendall & McDougall, 2011). Informing this were a critical discourse analysis of the socio-cultural framing of Subject Media (McDougall, 2010) and the three interventions we turn to here - research into perceptions of reading and being a reader by participants in the Richard and Judy Book Group (Kendall & McDougall, 2011); a mixed-methods study of male

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teenage gamers telling stories about their experiences in «Grand Theft Auto 4» (Kendall & McDougall, 2009) and a «multi-modal» remixing of Morley's Nationwide Study (1980) with contemporary application to audience groups' engagements with «The Wire» (McDougall, 2010). Each of these research studies were analysed for their potential to transgress orthodox «othering» arrangements of teacher-student and media-audience which, we argue, serve to reproduce culture and power relations that exclude by the imposition of self-regulatory identity-practices. Our thesis for After the Media is, then, informed by this series of ethnographic research interventions that have explored various ways of «doing media literacy» by fixing our attention on people and how they attribute meaning to culture and to their own reading and literacy practices – ways of being with others, and the role that media might play in this.

4. Results 1: On Being a Reader

For this study (Kendall & McDougall, 2011) the

discussion prompts offered for the discussion of particular novels on the website of the Richard and Judy book club (http://www.richardandjudy.co.uk) were analysed in relation to ideas about literature, reading and being a reader with particular attention to what the function of the interactive new media context for this might be.

Collins (2010) observes the transformation of American literary culture into popular culture and the role played by new digital media in this genealogy. Alongside institutional determinants related to the convergence of publishing and other media forms, Collins describes a fragmentation in the dynamics of access to literature:

> A number of other factors are the result of changes in taste hierarchies – the radical devaluation of the academy and New York literacy scene as taste brokers who maintained the gold standard of literary currency, the collapse of the traditional dichotomies that made book reading somehow naturally antagonistic to film going or television watching, and the transformation of taste acquisition into an industry with taste arbiters becoming media celebrities. And perhaps the most fundamental change at all, the notion that refined taste, or the information needed to enjoy sophisticated cultural pleasures, is now easily accessible outside a formal education. Its' just a matter of knowing where to access it, and whom to trust (Collins, 2010: 8).

Collins does not appear to be concerned with further dismantling the categories at work here - «refined taste», «sophisticated cultural pleasures» and, of course, the idea of literature itself. Nonetheless there is a resonance here with the project of media literacy and in particular the claims that Media 2.0 has a similarly fundamental impact on cultural hierarchies. To what extent, though, can these «taste dynamics» change purely through access alone, if the contextual elements of «distinction» (Bourdieu, 1984) and textual value remain intact?

An example of the kind of «celebrity arbitration» Collins describes, in the UK, is the Richard and Judy Book Club. However, whilst clearly offering an «out of school» route into engagement with literature, our research suggests that this new popular cultural

domain, in its provision of prompts for reading group discussion of its listed novels, operates in a hybrid space between opening up reading to an audience connected by a daytime TV show and maintaining schooled literature appreciation discourses. In this example, the imposition of the idea of «thematic significance» is discussed:

Readers are interpellated into the act of discussing something that is assumed to exist – thematic significance. This is presented as objective, in that such a theme can only be significant if it exists and can be looked at and known as such, outside of the thinking of the reader. There is no space for the reader to think that the phrase is not thematically significant, or that themes are questionable or that the idea of lines from a novel echoing other lines is subjective. (Kendall & McDougall, 2011: 18)

Just as this «reaching out» by the Richard and Judy group on behalf of and by the idioms of «Subject English» is a conservative practice, so too can media literacy be viewed as an intervention which appears more progressive than it has proven – in its normative and regulatory impact - to be.

The theorisation of reading practices at work in research into literacy is fundamental to the study of how people attribute meaning to media but that this domain has been largely ignored in favour of reductive models of media literacy. Ideas about reading in the discourses of media literacy are very similar to those that dominate other text conscious subjects like English and, so, a cross disciplinary idea of reading is in place that is rarely challenged - what Bernstein might call a «horizontal discourse» (1996). A multimodel, or «transmedia» approach will not in and by itself do much to subvert this more general meta-narrative of sense-making that understands text, reader, author and reading in particular as bound concepts - stable, fixed and certain - contributing to meaning making and taking in obvious and predictable ways.

4.1. Results 2: Just Gaming

Assessing the outcomes of a study (Kendall and McDougall, 2009) of young male players of «Grand Theft Auto 4» and how they talk and write / blog about in-game experiences in relation to theories of narrative from Subject Media, our approach to play was concerned with the brokering of particular ways of being in different modalities of practice. Participants play with the game, against and through the game for multiple audiences (us, each other, the online community) performing and re-performing versions of their (male) selves. To re-think young men's participation in

game cultures as a form of ritualised performance opens up new possibilities for re-reading the functionality of gaming in young peoples lives.

A group of 16-17 year old players were connected on a Facebook blog, sharing, to an open brief, narrative accounts of their gameworld experiences in the weeks after the release of the game and were subsequently interviewed with a set of common questions followed by supplementary enquiries to explore the style and content of their blog posts.

Drawing on post-structuralist understandings of self, Gauntlett reminds us that «we do not face a choice of whether to give a performance. The self is always being made and re-made in daily interactions» (2002: 141) and it this peformativity that is central to constructions of gender. What became quickly striking was the manner in which our participants, although on the surface interacting with a text that has been derided for its apparently amoral representation of vice, were contemporaneously playing with identities in ways which might be described in Maclure's (2006) terms as «frivolous». Maclure understands frivolity as «whatever threatens the serious business of establishing foundations, frames, boundaries, generalities or principles. Frivolity is what interferes with the disciplining of the world» (2006: 1). Furthermore, it is precisely this kind of posturing that Butler (1990) advocates in her incitement to make gender trouble.

Through the possibility of subverting and displacing those naturalized and reified notions of gender that support masculine hegemony and heterosexist power, to make gender trouble, not through the strategies that figure a utopian beyond, but through the mobilization, subversive confusion, and proliferation of precisely those constitutive categories that seek to keep gender in its place by posturing as the foundational illusions of identity. (Butler, 1990: 33-34)

We could, perhaps with some surprise, see our gaming participants as engaged in radical moves that threaten the stability of the binaries around which moral panic discourses converge. The participants shared an explicit and «knowing» meta-awareness of how to play against, with or despite the narrative that resonated with Gauntlett's idea of the postmodern «pick and mix» reader of magazines which are understood to offer possibilities for «being» that «might» be engaged with dialogically as the (female) reader is invited to play with different types of imagery (Gauntlett, 2002: 206). Such shared and quasi-conventional «parology» (Lyotard, 1985) – new moves in the game that disrupt orthodox analyses of effects and of reading itself – are perhaps our most compelling evidence that

there is no singular way of being in a game – more of an event than a text – like «Grand Theft Auto 4». This has clear and present implications for the key concept of audience in media education.

Such playfulness around identity stands as further evidence (if needed) of the need for a re-reading of masculinities as a way of re-positioning young men in relation to textual and literacy practices. Rejecting the discourses that locate male readers as victims and losers in terms of achievement in literacy, a further interpretation of our data allows us to construct the figure of the «baroque showman» – the fusion of «I» as player and «I» as character (Nico) as an act of resistance against becoming the object of study with the truth of identity eluded and eclipsed by the camp humour of the interplay. Such self-knowing, critical posturing queers, in Butler's sense, what it is possible to know, in the sense of grasp, about young people's engagement with popular textualities. For the development of critical media literacy, the acceptance of this is surely fundamental.

4.2. Results 3: The Audience (Remix)

Taking season 4 of the US drama «The Wire» (which deals with the US school system), we have explored (McDougall, 2010) how it might be possible to remix Morley's Nationwide study and in so doing we were unpacking much of the Media 2.0 thesis to challenge the part of that intervention which might assume too much about the end of the hierarchical nature of media production and reception at the same time as wanting to try out the move from doing Media to doing people. A major component, theoretically, of this intervention was the thinking through of secondary encoding as a refinement of Morley's model. But in this account, we will concentrate on the act of mapping the event of «The Wire» by the research participants to their textualised lives.

Five participant groups –all located in different ways in relation to formal education– were given different methods with which to reflect on the drama in relation of their lifeworlds. From online critics to a group of youth workers, a preferred reading emerged but differently constructed for each group. Media teachers provided an intertextual metalanguage coded as a semiotic chain of meaning (or a taxonomy in their words), with their own identities woven in. They assumed that the proximal relations of «The Wire», «Do the Right Thing» and «Public Enemy» – and the meanings attributed to such by white professionals (as several choose to identify themselves – an important detail since ethnicity was not a marker for this study)

would be understood. Drama lecturers were alike in their eagerness to discuss «The Wire» as a text, but more comfortable with a discourse of cultural value, and more distant from the form – television. Though their acquisition of cultural capital was close to their media counterparts, their mapping of the text to their lifeworlds came less instinctively. The youth workers appeared to have the most at stake, contrasting greatly with both the media teachers (for whom the reality depicted is mediated through other media references) and the drama teachers who confessed to having little direct experience of such aspects of social reality. For the youth workers the preferred reading was apparently articulated through lived experience either in the present or projected into the future (it's gonna come down on us). And subsequently there was less interest in the text, the craft or its objectives. For the education students a great deal was also at stake – their life experience and proximity to the social reality represented was closer to the youth workers, but their optimism for change marked their responses as different to all of the other groups - including the online critic-fans.

For audience after the media, what this study revealed about «The Wire» is far less interesting than how the research methods allowed for some more experimental and reflexive work with people. The reasons for the nuances and markers in the data from each group are not only a product of location in educational social practice but also by the research method – which was different for each group – employed. Critical media literacy research might, then, adopt this kind of «mash-up ethnography» to move away from the text to explore in new ways how people in culture attribute meaning to media – the event.

5. Discussion: Scales from Eyes

Jenkins (Berger & McDougall, 2011) draws our attention to a new kind of relationship between people and media: This represents a fundamentally different culture than one where media production and circulation is almost entirely professionalized. And in many cases, we are seeing what educational theorists describe as legitimate peripheral participation - that is, they are actively watching how culture gets produced with the recognition that they can engage and join the process when they feel ready (Berger & McDougall, 2011: in press).

Jenkins is drawing here upon the work of Lave and Wenger (1991), who observe the process by which individuals make the move from peripheral participation in social apprenticeships' to full participation. With this analogy we can develop a model of social

learning by which students, through their participation in social media education, progress from being peripheral to full practitioners in media audiences. So we are no longer looking at the audience as an object of study or at our own audience behaviour as reflection. Instead we are conceiving of full participation in culture as the key learning outcome. This full participation –«situatedness» in Lave and Wenger's terms– leads to the making of meaning and the articulation of identity, learning to articulate in culture, through and with media, as opposed to learning from the articulations of others – whether elite producers, canonized texts or legitimated fans. Once again, it is the construct of the media which has denied us this opportunity, as a «big Other» it imposes a distributive model of social capital whereby this currency is always-already and can only be acquired in relation to its normative gaze –social capital achieved through the academic modality– being critical about the media, or through the vocational modality – working within its idioms to gain access. The in between space will be a community of practice in which texts, events and exchanges are produced in the practice but the media is ignored.

However, might it be that this kind of «legitimate peripheral participation» was always-already a feature of our engagement with culture and mediation and the role of online digital media has merely been to make it visible? In this more mundane sense we can see more clearly now, in the public domain, hitherto private attributions of meaning, affinity and, perhaps, creativity. If we are to find new ways of doing critical media literacy in this context, a new kind of pedagogy will be important – a pedagogy of the inexpert. To use Lave and Wenger's terminology, the apprenticeship we want students serve is not craft or skill determined, but rather that they are apprentices in theorising their culture. Critical media literacy teaching must strive to facilitate «mastery» in a metalanguage which gives voice to reflexive negotiation of identity – a kind of «culture literacy».

Through a pedagogy of the inexpert we draw alternative subject positions for teachers and students engaged in critical media literacy work, predicated on models of post-structuralist educational practice but we refresh these for the contemporary environment in which, we suggest, the fluid, context bound and socially embedded nature of textual relations are more ordinarily and routinely fore-grounded. The apparent paradox of the inexpert teacher is purposeful and intended to communicate a shift in teacher expertise from orientation towards a mastery model of specialist content knowledge to a co-constructivist ethnographic model of finding out that takes as its common sense that the textual object is a fiction of textualisation to which models of reading are indexed and from which the traditional tools of critical literacy emerge.

The model of practice we're proposing is predicated on a model of reading which explores meaning-making as a category. That is to say, rather than elucidating something about genre, narrative, content or author, instead the practice is to ask - how meaning-

> A multimodel, or «transmedia» approach will not in and by itself do much to subvert this more general meta-narrative of sense-making that understands text, reader, author and reading in particular as bound concepts - stable, fixed and certain - contributing to meaning making and taking in obvious and predictable ways.

making is learned; what different kinds there are; what it is; who it is for; what sorts of things signify expertise; and what sorts of meaning-making are done in different kinds of contexts? This approach asserts as primary the constructedness of reading (and attributing meaning) within the context of cultural practice whilst simultaneously noticing the positioning and rootedness of individual agency within wider social relations. Couldry (2000) pays attention to the trajectories of individual agents negotiating «textual fields» through the «total textual environment» and this offers a new focus for the type of exploratory work that inverts the dynamics of traditional investigative endeavour of text conscious subjects from a concentration on text to a focus on people. This does not imply the mass demographic, projected idea of audience but instead a sense of real readers in real contexts, readers that Hills recognises as «textualised agents [who] make certain texts matter in a way that allows new, text-derived, social groupings to emerge» (2005: 29).

We can begin to see that a critical pedagogy founded on this set of ideas might look very different to the kind of textual analysis and audience research models we have been used to because a pedagogy based on this kind of understanding will of necessity be process rather than content orientated. That is to say the focus of study will not be the text but the tracing and analysis of textual fields, the choices individuals make as they negotiate myriad texts and the common patterns in their selections. The work of the teacher in this version of textual practice is to facilitate ethnographic enquiry that enables young people to read the «textualized stories of their lives» (Kehler & Greig, 2005: 367). This is what we think of as critical media literacy. Far removed from OFCOM's key competences, Internet safety and digital literacy but also resistant to the technological determinism and binary oppositions of Media Studies 2.0 and its skeptical respondents and, crucially, more critical – in the move away from the media towards being with others and with media – than the linguistic determinism of multimodality.

For Gee and Hayes (2011), the most profound effect of digital media is its breaking down of the restrictions of literacy –who has the access to the means of production of knowledge. The implications of this for pedagogy are obvious– the barriers between the expert and the student mirror, in some ways, those between the professional author / journalist / producer and the amateur / apprentice. Enacting this kind of pedagogical practice requires a very different kind of teacher expertise, of course. We need a reading of teacher identity against the grain to accept our awareness of, but unfamiliarity with and inexpertise in the particular textual fields of learners and the ways they make texts matter. The role of the teacher in this dynamic is to facilitate and scaffold the auto-ethnographic story-telling of learners and to accept and embrace the more unchartered, unknowable learning spaces that emerge, learning spaces that, we assert, are charged with productive possibility.

In simple terms, despite the arguments over access, participation, technological affordances and what happens to literacy in new media environments, there is a shared desire amongst media educators to find a way of doing critical media literacy at this time, in this changing landscape. In many ways, our pedagogy of the inexpert is nothing new – we merely extend existing ideas about facilitation and the shared construction of knowledge, along with elements of «deschooling». However, our observation that the exclusive categories of teacher / student cannot be challenged without doing the same to media / audience is we hope, more considered, subtle, cautious and critical than Media 2.0 and yet calling for change, for a shift in our practice is at the heart of our analysis. The incomplete project of critical media literacy can be resurrected through the formulation of new local rules and microstrategies for learning about how textual experience – but not the media – is part of making sense of ourselves and how we might be together.

References

BENNETT, P.; KENDALL, A. & McDOUGALL, J. (2011). *After the Media: Culture and Identity in the 21st Century*. London (UK): Routledge.

BERGER, R. & McDOUGALL, J. (2011). Apologies for Cross-posting: a Keynote Exchange (interview with Henry Jenkins). *Media Education Research Journal* (02-01-2011).

BERNSTEIN, B. (1996). *Pedagogy, Symbolic Control and Identity: Theory, Research, Critique*. London (UK): Taylor & Francis.

BOURDIEU, P. (1984). *Distinction: A Social Critique of the Judgement of Taste*. London (UK): Routledge.

BUCKINGHAM, D. (2010). The Future of Media Literacy in the Digital Age: Same Challenges for Policy and Practice. *Media Education Journal*, *47*; 3-10.

BUCKINGHAM, D. (2011). *Keynote Address: Breaking Barriers*. AMES Conference, Dundee (UK), (14.4.11).

BUTLER, J. (1990). *Gender Trouble: Feminism and the Subversion of Identity*. London (UK): Routledge.

COLLINS, J. (2010). *Bring on the Books for Everybody: How Literary Culture Became Popular Culture*. London (UK): Duke University Press.

COULDRY, N. (2000). *Inside Culture: Re-imagining the Method of Cultural Studies*. London (UK): Sage.

GAUNTLETT, D. (2002). *Media, Gender and Identity: an Introduction*. London (UK): Routledge.

GEE, J. & HAYES, E. (2011). *Learning and Language in the Digital Age*. London (UK): Routledge.

HILLS, M. (2005). *How to do Things with Cultural Theory*. London (UK): Hodder Arnold.

INSTRELL, R. (2011). Breaking Barriers: Multimodal and Media Literacy in the Curriculum for Excellence. *Media Education Journal*, *49*; 4-11.

KEHLER, M. & GREIG, C. (2005). Reading Masculinities: Exploring the Socially Literate Practices of High School Young Men. *International Journal of Inclusive Education*, *9; 4*; 351-370.

KENDALL, A. & McDOUGALL, J. (2009). Just Gaming: on Being Differently Literate. *Eludamos: Journal for Computer Game Culture, 3: 2*; 245-260.

KENDALL, A. & McDOUGALL, J. (2011). Different Spaces, Same Old Stories? on Being a Reader in the Richard and Judy Book Club. In COUSINS, H. & RAMONE, J. (Eds.). *The Richard and Judy Book Club Reader*. London (UK): Ashgate.

LAUGHEY, D. (2011). Media Studies 1.0: Back to Basics. *3D, 16;* 13-15.

LAVE, J. & WENGER, E. (1991). *Situated Learning: legitimate Peripheral Participation*. Cambridge: Cambridge University Press.

LEAVIS, F.R. &THOMPSON, D. (1933). *Culture Environment*. London: Chatto and Windus.

LYOTARD, J. & THEBAUD, J. (1985). *Just Gaming*. Minneapolis, MN: Minnesota University Press.

MACLURE, M. (2006). Entertaining Doubts: on Frivolity as Resistance. In SATTERTHWAITE, J.; MARTIN, W. & ROBERTS, L. (Eds.).

Discourse, Resistance and Identity Formation. London (UK): Trentham.

Masterman, L. (1985). *Teaching the Media*. London: Comedia.

MCDOUGALL, J. (2010). Wiring the Audience. *Participations 7, 1*; 73-101.

MERRIN, W. (2008). *Media Studies 2.0* (twopointzeroforum.blogspot.com) (20-06-11).

MORLEY, D. (1980). *The «Nationwide» Audience: Structure and Decoding*. London (UK): BFI.

MURPHY, D. (2010). Euromeduc: the Second Congress of Media Education Practitioners. *Media Education Journal, 47*; 23-27.

NAUGHTON, J. (2010). Everything You Ever Needed to Know about the Internet. *The Observer* (www.guardian.co.uk/technology/2010/jun/20/internet-everything-need-to-know) (20-06-11).

TYNER, K. (1999). *Literacy in a Digital World: Teaching and Learning in the Age of Information*. London (UK): Routledge.
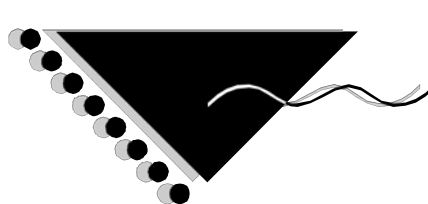
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Media Education, Media Literacy and Digital Competence

Educación para los medios, alfabetización mediática y competencia digital

ABSTRACT

This article addresses some possible relationship between education and media in contemporary society and explores the role that formal education should play in both the integration of media in the curriculum and the digital literacy skills necessary for the 21st century. The authors discuss here different theories and approaches that have dominated international media studies, media education and media literacy in recent decades. Confusion and misunderstandings in terminology for contemporary literacy in a complex, global and intercultural environment are explored and the authors present some inclusive categories for 21st century literacy such as media literacy, digital, multimodal, critical and functional. Interpretations of media literacy and digital competencies are discussed with particular emphasis on the current European regulatory framework. The authors warn that reductionist interpretations that focus on applied technical competencies with devices, hardware and software have the potential to severely limit media literacy education. Instead, the authors stress critical approaches as central to media literacy. In addition to technical competency, the authors highlight the need to include a broader and deeper analysis of the social uses, attitudes, and values associated with new media tools, texts and practices.

ABSTRACT (Spanish)

El presente trabajo aborda las posibles relaciones entre educación y medios en la sociedad actual, y el papel que le corresponde a la educación formal tanto en la integración curricular de los medios como en la alfabetización digital necesaria para el siglo XXI. Se parte de distintas concepciones y enfoques que en las últimas décadas han predominado en el estudio de los medios y en la educación y alfabetización mediáticas en el panorama internacional; se intentan subsanar algunos problemas terminológicos derivados de la riqueza idiomática del mundo global e intercultural en el que nos movemos; se buscan posturas integradoras y se propone una alfabetización para el siglo XXI que se caracteriza por ser mediática, digital, multimodal, crítica y funcional. Se analizan posibles interpretaciones de educación mediática y competencia digital prestando especial atención al actual marco normativo europeo y se advierte de dos posibles peligros: reducir la educación mediática al desarrollo de la competencia digital, y reducir la competencia digital a su dimensión más tecnológica e instrumental: centrarse en los conocimientos técnicos, en los procedimientos de uso y manejo de dispositivos y programas, olvidando las actitudes y los valores. Para evitar el reduccionismo y el sesgo tecnológico se recomienda recuperar para el desarrollo de la alfabetización mediática y de la competencia digital los enfoques más críticos e ideológicos de la educación para los medios.

KEYWORDS

Media, education, literacy, digital, media literacy, digital competence, media education.
Medios, educación, alfabetización digital, alfabetización mediática, competencia digital, educación mediática.

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1. Introduction

Rapid changes in the uses of information and communication technologies in recent decades continue to generate both subtle and signficant restructuring in every sector of society. As such, the pervasive access, ubiquity and daily reliance on multimedia devices are the «new normal». Their omnipresence is particulary resonant with younger generations of users who approach information in diverse and innovative ways that position their daily uses of ICTs and related new media practices as an essential life skill.

Although education is widely seen a pathway to personal, academic and career preparation, the education sector lags in its comparative response to ICTs. On the whole, its response is piecemeal and calls into question the traditional assumptions about the design of the learning environment and its effect on widespread social and cultural needs within the context of contemporary media forms, content, skills and practices. Among the main features of the increasingly global and digital society of the early 21st Century are multiculturalism, the increased capacity to store and retrieve of information, access to broad social networks, and the ability to use computer networks to transcend time and space. Instead, it could be said that the education sector is an anachronism in its own time as it continues to prepare students for a society that no longer exists.

When the number and types of literacy devices used by students outside of school are compared with the literacy tools and texts used in formal education, it is obvious that young people must unplug to participate in the classroom. In the process, they must also power down their own habitual ways of working with information and related cultural interests. As a result, students transverse a polarized existence of formal and informal learning environments. One the one hand, they spend most of their day in schools that are far removed from their own authentic media and information skills, interests and needs. On the other hand, they pursue these interests and hone their skills through peer learning and knowledge networks in the world outside of school. With few bridges between these parallel worlds, many students do not even bother to try establish connections between the informal and formal education sectors.

From our point of view, the most dangerous ramifications of this mismatch is not the lack of access to digital devices or «gadgets», nor the fact that access to timely and relevant information is routinely blocked in classrooms. Instead, it is much more troubling that widespread ideals and assumptions about the mission of compulsory schooling as a preparation for social and civic life are unraveling. As schools increasingly marginalize the every day literacy skills of students (and increasingly teachers), this social contract is broken. Given the narrow versions of literacy practiced in the classroom, it obvious that formal schooling is not necessary. Students would prefer to learn about the functions of ICTs through informal environments such as peer networks, online or even at their local computer store. The social contract for formal education implies much more, with new forms of literacy at its center. To reinstate public confidence in the value of schooling for social preparation and personal fulfillment, we envision a critical, dignified and liberating concept of literacy. Efforts to reconnect and support contemporary literacy practices in formal schooling go well beyond competencies with digital devices and networks. It is also important that formal education incorporates skills and practices that support students' critical autonomy and awareness of the relevant contexts of their media use. These efforts also go well beyond a reactive response to the commercial interests of the dominant digital media companies of the moment.

A broader vision for the accommodation of new literacy skills will require significant restructuring in the education sector. With the dominance of high-stakes standardized testing in formal schooling, it remains to be seen how schools can transform widespread content delivery modes into critical, participatory designs for the learning environment. In order to prepare individuals for life in a global multicultural, digital world, formal education must also trascend the narrow focus on test scores and grades to embrace students' existing knowledge, skills and practices, learned outside schools. In this way, ICTs are central to the restructuring of most contemporary formal schooling environments and a catalyst for revisioning the mission of compulsory education to support and encourage active citizenship and self-expression in a democratic society.

Many scholars stress the need to expand the concept, content and purposes of traditional literacy in order to accomodate contemporary digital, multimodal and media literacy. In prior articles, we stress that digital literacy or media literacy are foundational to basic education in an Information Age (Tyner, 1998; Gutiérrez, 2003). In recent years, a number of scholars have defined these new literacy concepts as audiovisual literacy, informational, multimodal, media literacy, digital competency and so on. Although the technical proficiencies may differ, these multiple definitions of literacy actually correspond with the same concepts, aims and purposes of traditional literacy. It is easy to

envision a time in the near future when these multiple terms may be described simply as «literacy».

2. Integrating Media Into the Curriculum

Historically, as each new medium is adopted in society, schools have attempted to integrate them into the classroom curricula. From the uses of film in the 21st Century to the current promotion of whiteboards in the classroom, each new device or medium has been promoted as a benefit and a support to learning. In this tradition, contemporary digital media, networked communication and ICTs are most often introduced into the curriculum at the discretion of the teacher, as a an ancillary content delivery tool.

Given the ubiquity and dominance of multiple media in the informal education of children and youth, it is not as if schools are unaware of the pervasive influence of media. For many years, schools have attempted to integrate media tools and texts into classroom practice. However, it is becoming increasing apparent that it is not enough to simply teach and learn «with» media, but that a comprehensive educational environment also requires that students study «about» media in order to analyze the world of new texts, technologies and their relevant contexts. In the English-speaking world, the study of media has emerged as «media studies» which addresses the reception of media content, distribution and related aesthetic and production processes within historical, economic and cultural contexts, usually from a social science or humanities theory base.

Now more than ever, it is necessary to clarify and bridge the «with» or «about» approach to media education. At every level of education, media and digital literacies are often approached from a strictly technical perspective, resulting in a goal of literacy competencies based on the way that hardware and software applications can be mastered and directly applied to tradi-

tional learning environments. As a result, media education is often associated with simply attaining the applied skills needed to navigate computer networks, virtual worlds, software platforms, social networks or media production tools and editing devices. Scholars and practitioners have attempted to clarify the differences between teaching «with» versus «about» media by defining applied mastery of ICTS as «digital literacy» and alternatively defining critical approaches to

> Perhaps the brilliance and fascination with new media prevent us from seeing the end goal of personal development, a goal shared by both media education and general education. Perhaps the expectations created by technological discourses about the way that ICTs can solve social problems require more dymystification before the integration of critical approaches can be seriously considered. Perhaps in our neoliberal society, market models will remain focused on generating capital and consumption, thus subsuming media literacy education under the banner of applied education and free market discourses. Given these scenarios, it seems more necessary than ever to focus on the most critical and ideological aims, purposes and approaches to media education in the service of both media literacy and digital competency in a global, multicultural world.

media as «media literacy». However, the distinction between the two can still be confusing.

This dichotomy still favors the teaching «with» media over the «about» media approach in educational institutions. For example, educational technology courses in teacher training curricula, when they are offered, tend to support the «with» approach. Critical media studies and media literacy courses have struggled without much success for a place in all segments of the compulsory education curriculum in different

countries. There are many reasons for this, not the least of which is the dominance of commercial inte-rests in the integration of classroom resources associa-ted with media education, such as computer hardwa-re, software, and presentation tools. The potential for increased ICTs in the classroom and the resulting mar-ket share for hardware and software sales in the edu-cation sector, increases the advocacy for their integra-tion by commercial interests, but it does not necessarily mean that the new media tools are being integrated in a way that supports learning in a meaningful way.

Media studies are an important component of media education and often offered as an elective or

how they produce meaning, how they are organized, and how they construct reality. Media literacy also aims to provide students with the ability to create media products» (Media Literacy Resource Guide, Ministry of Education Ontario, 1989).

Many authors and researchers have offered diffe-rent views and approaches to media education and media literacy over the past three decades. We refer the reader to an inventory by Aparici (1996) for a detailed catalog of these theorists from the late 20th Century. More recently, and equally illustrative, are two specific issues dedicated to media education and media literacy by the scholarly journal «Comunicar» (Various, 2007; 2009).

The rapid adoption of digi-tal networks and new informa-tion and communication tech-nologies substantially modifies media forms and content, as well as users' relationship with information. This is reflected in new approaches to media education as it moves beyond the critical analysis and practi-ces related to radio, television, film and pop culture to the cri-tical reception and uses of ICTs such as mobile devices, the Internet, video games, social networks, WebTV, interactive digital boards, vir-tual worlds, and so on.

> The five basic skills for media and information literacy that were recently identified by UNESCO (understanding, critical thinking, creativity, cultural awareness and citizenship) may be worthy heirs to further the traditions of critical media literacy from the mass media era of the last century. These skills diverge significantly from the narrow focus on «information processing and digital competencies» to embrace the relevant skills related to the critical skills necessary for competence in social, civic, cultural and artistic endeavors.

Since Gilster (1997) popu-larized the concept of «digital literacy», many terms have been used to describe the skills and knowledge needed to navigate in the converged, digital media environment of contemporary society. They include «multiliteracies» (Cope & Kalantzis, 2000; Kress, 2000; Jenkins & al., 2006; Cope & Kalantzis, 2009; Robinson, 2010); «multimedia literacy» (The New Media Consortium, 2005); «new media literacy» (Jenkins & al., 2006; Dussel, 2010); «media and information literacy» (UNESCO, 2008: 6); and «media literacy education» (Alliance of Civilizations, www.aocmedialiteracy.org).

single subject area in Anglo-Saxon schools. However, media studies is also only one strand in a comprehen-sive program of critical media education. This breadth and complexity is based in part on the fact that media literacy, like traditional literacy, cuts across the curricu-lum in an interdisciplinary way. In the last century, media education was centered on curricular strategies to enhance the critical reception of the traditional mass media. Along these lines, one of the most widespread definitions from that era was proposed by the Ontario Ministry of Education (Canada) and is still used to this day: «Media literacy is concerned with helping stu-dents develop an informed and critical understanding of the nature of mass media, the techniques used by them, and the impact of these techniques. More speci-fically, it is education that aims to increase the students' understanding and enjoyment of how the media work,

It is not our intention here to delve deeply into the syntax and nuances of the diverse terminology used to describe the various literacies related to the uses of media and ICT, such as information literacy, multimo-dal, transmodal, multimedia, digital, audiovisual, media, and so on. However, it seems necessary in the context of this bilingual issue of «Comunicar» and similar acade-

mic environments to clarify some terms for discussion.

Grizzle (2010) addresses this challenge and identifies two basic trends that shed light on the relationship between the converging areas of media literacy and information literacy. On the one hand, information literacy sees media education as a subset of its broader tenets. On the other hand, media literacy conceptualizes information as a subcategory of its broader spectrum of concerns. UNESCO (2008: 6) attempts to bridge these two concepts with the term «media and information literacy». By integrating the two concepts, UNESCO seeks to acknowledge the underlying aim of both is to support the compendium of skills, competencies and attitudes that children, youth and other citizens need to function and thrive in a digital society.

For the purposes of this discussion, we will promote the integrative position implied by «media and information literacy». Too much time is spent highlighting the differences and defending various literacies as they compete for space in the school curriculum. In the process, the common purposes of both new and old literacy practices in a comprehensive education is too often lost. And so, we will characterize various literacies and multiliteracies as different, complementary dimensions of a multiple, global literacy. In this regard, instead of «new literacies» it may be more convenient to discuss new dimensions of literacy. By necessity, it can be assumed that these dimensions are best discussed within the contemporary context of ubliquitous, digital convergence and therefore includes media literacy, digital literacy and multimodal literacies.

The concept of literacy in Spain (alfabetización) has a much different connotation. In Spanish, the term is understood as a process akin to educating, teaching or instructing. In other words, «alfabetización» implies process rather than result. In contrast, «literacy», according to the «Merriam-Webster Collegiate Dictionary» (www.mw.com) is «the quality or state of being literate». This underscores the English concept of literacy as a competency that results from the educational process. In the English-speaking world, «media education» is the teaching-learning process and «media literacy» is the result, that is, the knowledge and skills that students acquire (Buckingham, 2003: 4).

Although the «RAE (Real Academia Espanola)» dictionary (http://rae.es/rae.html) also defines literacy as «action and effect of literacying» (acción y efecto de alfabetizar), when talking about media literacy, practitioners usually refer to a process or action and not to the result. Recently, the «RAE» incorporated the term «alfabetism» as «basic knowledge of reading and writing» (in opposition to «analfabetism», or illiteracy. «Alfabetism» is closer to the English concept of «literacy». Although perhaps tedious, in the spirit of cultural competency, it is not possible for a fruitful bi-lingual discussion of terms such as «media education» or «media literacy education» to take place if these nuances are not understood.

In any case, the concept of literacy that encompasses media literacy, digital literacy and multimodal literacy implied in the UNESCO term, «media and information literacy», also diverges into two concepts that we must include here for purposes of discussion. These are:

Critical Literacy. In recent decades, some authors who speak of new literacies, especially those more focused on new digital devices than on their uses by people, have ignored or rejected more critical or analytical approaches to media education. As noted by Gutiérrez (2008), the basic principles of a critical education are perfectly compatible with the tenets of media education.

Functional Literacy. In 1970, UNESCO (1970: 9) explained this concept in this way: «Functional literacy differs from traditional in that it is not an isolated, distinct, or even an end in itself, but it allows us to consider the illiterate as an individual or a member of a group, according to a given environment and to a developmental perspective». In later UNESCO (1986) documents, the «illiterate» concept is diminished and the social characteristics of literacy and its contribution to the social good are stressed: «Functional literacy refers to people who can perform all activities necessary for the effective function of their group and community and that also allows one to continue using reading, writing and calculation for his own development and that of their community».

Although dated, the statement is useful for an understanding of the fidelity of these concepts on a continuum of alphabetic to media literacy. It positions literacy as the ability to encode and decode messages in different languages and media, compatible with contemporary assumptions about media literacy. Furthermore, the concept of community that UNESCO refers to in 1986 is still applicable to a global, multicultural society today. It stands to reason that as media becomes increasingly social and universal, so does media literacy.

3. Media literacy and digital competence

Although the term «literacy» is closely associated with orality, alphabetic practices and digital media, it

can be considered, in its broadest sense, as a threshold to support basic life skills and access to social capital. In the beginning, the basic competencies for print literacy was to decode written text (to read) and to produce alphabetic and numeric texts (to write). Since the second half of the last century, this decoding and encoding process also included audiovisual codes and languages. The current development of ICTs demonstrates again that form and content are closely related to processes involving the encoding of information and the structuring of knowledge. The point is that literacy is a concept that is vibrant and dynamic and constantly evolving. Its attainment provides the basic foundations for improving one's life chances and engaging in society with purpose and dignity.

In December 2009 the European Parliament approved the introduction of a subject of «educación mediática» (Media Education) a term that has come to replace «educación para los medios» (Education for the Media) in Spanish. With a focus on access, it was recommended that this subject, or related course, should be integrated into the curriculum at all levels of schooling. In the report that was adopted by the plenary, the members of Parliament also stressed the need to improve the infrastructure in schools so that children are ensured access to the Internet. It also promoted media literacy for adults who are engaged with children's media use habits, such as parents and teachers. The report explains that media literacy involves the ability to understand and critically evaluate various aspects of different media and to accurately filter information received through a torrent of data and images. The report argues that developing this capacity is essential to leveraging the opportunities of the digital age.

The balance between an emphasis on analysis (reading) and production (writing) has been an issue in literacy education and this report is no exception. The report adopted by the European Parliament positions copyright protection and strong intellectual propery rights as central tenets of media education. In other sections of the report, the Parliament recommends the production of media in the practical training of students and teachers. However, concepts of media education related to the creative and participatory production of multimedia products through shared knowledge creation, free culture, Creative Commons, or other free licensing platforms are not mentioned in the report. As a result, the recommendation favors a model of media «consumption» with strong protection for commercial interests and ignores issues of fair use and protection for user generated content in the «prosumer» model.

Again in this regard, the UNESCO (2008: 6) definition for media education provides a more balanced concept for media and information literacy that supports both critical reception and critical production of media products. Although it is fair to say that the social norms regarding fair and ethical uses of media are unresolved in a time of rapid proliferation of digital practices, the UNESCO concepts imply user responsibility for the ethical uses of information in order to participate in a cultural dialogue, within the context of critical autonomy and creative production. In this regard, it can be said that some potential core competencies for media and information literacy potentially revolve around «5Cs»: Comprehension, Critical Thinking, Creativity, Cross-Cultural Awareness, and Citizenship.

In this context, we can discuss «competencia digital» (digital competence) in a more comprehensive way. Also, in the spirit of cultural competency, it is important to note that although «digital literacy» is usually translated from Spanish to English as «alfabetización digital», the Spanish term «competencia digital» (digital competency) is actually closer to the broader competencies for literacy in contemporary society.

Since the last decades of the 20th Century, educational reform discussion have increasingly centered on concepts of competence-based or standards-based designs for learning as the dominant discourse in the education sector. A prime example is the European Commission and Member states participating in the Eudcation and Training 2010 Work Programme. The Programme established key competencies for lifelong learning, published in the «Official Journal of the European Union» (December 30, 2006: L394). Member states of the EU are encouraged to use these competencies as guidelines to direct their educational policies. In this context, Spain now considers the core competencies as a basic educational goal of compulsory education, as reflected in its current Education Act.

For example, in the Real Decreto 1513 (December 7, 2006), eight core competencies are defined for the Primary Education curriculum:
• Linguistic communication.
• Mathematical.
• Knowledge and interaction with the physical world.
• Information processing and digital.
• Social and civic.
• Cultural and artistic.
• Learning to learn.
• Autonomy and personal initiative competencies.

Of particular relevance to our discussion here is number four, information processing and digital competencies, which encompasses the ability to seek, obtain, process and communicate information which can then be tranformed into the creation of knowledge. These competencies incorporate a diverse range of skills, ranging from access to information to the capability to analyze it, produce it and distribute it in a variety of forms, incliuding the uses of information and communication technologies as essential tools for information gathering, learning and communication.

Information processing and digital competencies are also associated with searching, retrieving, sorting, storing, recording, processing and analyzing information by strategically using a variety of strategies to verify the source and discourse of the communication for each form of media communication (textual, numeric, iconic, visual, graphic, sound, etc.). This process includes decoding and recognizing patterns of communication that can be applied to different situations and contexts. It includes knowledge of the affordances for different types of information, their sources, their placement and the specialized vocabulary used for each media and distribution network.

According to the Commission of European Communities, information and digital competencies «are those that citizens require for their personal fulfillment, social inclusions, active citizenship and employability in our knowledge-based society». According to these proclamations, consideration of the importance of the digital and media dimensions of new, global literacy practices in the educational sector is of the utmost importance.

There is no doubt that digital competency is an essential life skill in contemporary society, but in formal education, this has translated into an overly restrictive and narrowly applied set of tool-based competencies. This diminished and isolated iteration of digital competency ignores the broader and deeper critical literacy skills necessary to navigate in the Age of Information. We argue here that repeated efforts to isolate the two terms «media literacy» and «information literacy» has the potential to divide and confuse efforts to integrate authentic literacy education into the curriculum. It becomes increasingly clear that the proliferation of digital media must be addressed by the education sector, however efforts to isolate applied skills from critical skills also has the potential for more clashes over curricular turf in formal schooling.

We noted earlier that the rapid development and

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adoption of ICT hardware and software may paradoxically inhibit efforts to integrate media and information literacy education, as these devices may lead practitioners and policymakers, more or less unconsciously, to more technical and applied approaches to media education that are focused on the uses and manipulation of equipment. As previously noted, the embrace of applied approaches over critical approaches is also supported by vendors who hope to market new devices to the public education sector, but also by anxiety in the general public related to the potential of workforce development for high tech job. In the end, current efforts to position «digital competence» as the

most efficient way to address the need for educational technology distracts from much-needed attention to other essential priorities for media literacy education.

Buckingham (2011) articulates this confusion in his examination of the way that the meaning attributed to digital literacy tends to be narrower and related to the technology itself, much as we see in articulations of «digital competency». According to Buckingham, a reductionist view of media literacy is spreading, due mainly to the proliferation and spread of digital technologies, but also to the way that educational bureaucrats and policymakers implement the curricular integration of new media. Priorities are given to content that supports the «know how» of technology used for information management.

In addition, media literacy is often associated with protectionist approaches, such as Internet dangers. Historically, protectionist approaches occur with the popular adoption of each new medium and related genre, from print to comic books to film to television. In this regard, networked, digital media revives some of the same protectionist approaches for media education that have been seen in the past, such as the promotion of media literacy education in schools in the 1980s as a way to protect children from the supposed negative effects of television and other mass media. Innoculatory approaches of this type emerged early in discussions about the importance of media literacy education in a digital age. Hopefully, as advocated by Masterman (1993) and as seen in the last decade of the 20th Century, the popularity of protectionist approaches to media literacy education will succumb to more critical approaches.

«Media literacy», or better yet, «literacy» (without qualification) should address all aspects, objectives, content, contexts and implications related to the presence and importance of media in our society. In a way, we are only trying to revive some of the key critical approaches to media education for the «old» media and apply them again to «new» media. According to Masterman (1993), alll media are constructions that represent beliefs, values, and biases that subsequently influence their reception. As such, new media, such as the Internet, social networks, video games and so on could be seen as educational agents. Along these lines, it is appropriate for critical media literacy to address the major ideological and economic interests around ICTs and to support the critically analysis of the political economies of media business and the role of audiences as «prosumers». This can be instructive in ways that avoid the moral panics of protectionist and innoculatory versions of media educa-

tion that were promoted in the past. The five basic skills for media and information literacy that were recently identified by UNESCO (understanding, critical thinking, creativity, cultural awareness and citizenship) may be worthy heirs to further the traditions of critical media literacy from the mass media era of the last century. These skills diverge significantly from the narrow focus on «information processing and digital competencies» to embrace the relevant skills related to the critical skills necessary for competence in social, civic, cultural and artistic endeavors. It is becoming increasingly apparent that although information processing and digital competencies are inextricably linked to media literacy, they are, at best, a threshold with limited uses for broader fluency in diverse social contexts. In short, we see two risks with the current rush to integrate media literacy education into public education by limiting the complex subject of literacy to a narrow set of skills that: 1) reduce media education to the development of digital competencies; and 2) to limit digital competencies to its most technical dimension by focusing on the narrow expertise needed to navigate hardware and software. Curriculum integration strategies of this type exclude the necessary critical approaches that have long been used to define the social uses and benefits of literacy.

Perhaps the haptic pleasure of ICTs and our multiple digital devices divert us from critical contexts and lead us to a more applied technological and narrative approach. Perhaps the brilliance and fascination with new media prevent us from seeing the end goal of personal development, a goal shared by both media education and general education. Perhaps the expectations created by technological discourses about the way that ICTs can solve social problems require more dymystification before the integration of critical approaches can be seriously considered. Perhaps in our neoliberal society, market models will remain focused on generating capital and consumption, thus subsuming media literacy education under the banner of applied education and free market discourses. Given these scenarios, it seems more necessary than ever to focus on the most critical and ideological aims, purposes and approaches to media education in the service of both media literacy and digital competency in a global, multicultural world.

References

APARICI, R. (Coord.) (1996). *La revolución de los medios audiovisuales: educación y nuevas tecnologías*. Madrid: De la Torre.
BUCKINGHAM, D. (2003). *Media Education: Literacy, Learning, and Contemporary Culture*. Cambridge/Oxford: Polity Press-Blackwell Publishing.

BUCKINGHAM, D. (2011). *Media Literacy: New Directions or Losing our Way? Manifesto for Media Education Symposium*. London: Royal Institute of British Architects (10-06-2011).

COMUNICAR (Ed.) (2007). La educación en medios en Europa. *Comunicar, 28*.

COMUNICAR (Ed.) (2009). Políticas de educación en medios: aportaciones y desafíos mundiales / Mapping Media Education Policies in the World. *Comunicar, 32*.

COPE, B. & KALANTZIS, M. (Eds.). (2000). *Multiliteracies: Literacy Learning and the Design of Social Futures*. London: Routledge.

COPE, B. & KALANTZIS, M. (2009). Multiliteracies: New Literacies, New Learning. *Pedagogies. An International Journal, 4, 3*; 164-195.

DUSSEL, I. (2010). *Los nuevos alfabetismos en el siglo XXI: Desafíos para la escuela*. (www.virtualeduca.info/Documentos/veBA09%20_confDussel.pdf) (29-05-2011)

GILSTER, P. (1997). *Digital Literacy*. New York: Wiley & Sons, Inc.

GRIZZLE, A. (2011). Media & Information Literacy: The UNESCO Perspective. In School 2.0. A global perspective. *The Journal of Media Literacy. 57*; 1-2. (www.journalofmedialiteracy.org/index.php/current-issue/133-media-a-information-literacy-the-unesco-perspective) (29-05-2011).

GUTIÉRREZ, A. (2003). *Alfabetización digital: Algo más que ratones y teclas*. Barcelona: Gedisa.

GUTIÉRREZ, A. (2008). Educar para los medios en la era digital / Media education in the digital age. *Comunicar, 31*, XVI; 451-456 (http://dx.doi.org/10.3916/c31-2008-03-034).

JENKINS, H. & AL. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. (www.newmedialiteracies.org/files/working/NMLWhitePaper.pdf) (29-06-2011).

KRESS, G. (2000). Multimodality. In COPE, B. & KALANTZIS, M. (Eds). *Multiliteracies: Literacy Learning and the Design of Social Futures*. London: Routledge.

MASTERMAN, L. (1985). *Teaching the Media*. London: Comedia.

ROBISON, A. (2010). New Media Literacies by Design. In TYNER, K. (Ed.). *Media Literacy. New Agendas in Communication*. New York & London: Routledge.

THE NEW MEDIA CONSORTIUM (Ed.) (2005): *A Global Imperative. The Report of the 21st Century Literacy Summit*. NMC. (California).

TYNER, K. (1998). *Literacy in a Digital World: Teaching and Learning in the Age of Information*. New Jersey: Lawrence Erlbaum and Associates.

TYNER, K. (Ed.) (2010). *Media Literacy. New Agendas in Communication*. New York & London: Routledge.

UNESCO (1970). *La alfabetización funcional. Cómo y por qué*. Paris: UNESCO (COM.70/11./31).

UNESCO (Ed.) (1986). *Revised Recomendations Concerning the International Standardization of Educational Statistics*. UNESCO's Standard-setting Instruments, V3 B4. Paris.

UNESCO (2008). *Teacher Training Curricula for Media and information Literacy. Report of the International Expert Group Meeting*. Paris: International UNESCO. (http://portal.unesco.org/ci/fr/files/27508/12212271723Teacher-Training_Curriculum_for_MIL_final_report.doc/Teacher-Training%2BCurriculum%2Bfor%2BMIL%2B-%2Bfinal%2Breport.doc (29-06-2011).

VARIOUS (1989). *Media Literacy. Resource Guide*. Ontario: Ministry of Education. Queen's Printer.

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Global Teachers: A Model for Building Teachers' Intercultural Competence Online

Docentes globales: un modelo para el desarrollo de la competencia intercultural on-line

ABSTRACT

Foreign language ability, global awareness, and intercultural communication skills are increasingly recognized as essential dimensions of productive participation in the emerging economic, civic, political and social arenas of the 21st century. Consequently, these skills are being promoted more intentionally than ever across the spectrum of K16 education. This newly articulated set of objectives for today's students implies a concomitant set of competencies in educators. These competencies have not traditionally been a focus of professional development efforts in the United States, and little is known about how best to cultivate these competencies in educators. These competencies can be understood in terms of Byram's (1997) model of intercultural communicative competence (ICC). The principles of ICC development point to online learning as a potentially powerful lever in cultivating teachers' own competencies in this arena. A review of studies of intercultural learning, technologically-mediated intercultural learning and online teacher professional development is offered to suggest how these three domains might overlap. A synthesis of the findings across these literatures suggests a set of principles and educational design features to promote the building of teachers' intercultural competencies. A key finding reveals the unique affordances of networked technologies in online learning opportunities to support the development of intercultural competencies in teachers across all subject areas.

ABSTRACT (Spanish)

La competencia en lenguas extranjeras, la conciencia global y la comunicación intercultural están cada vez más reconocidas como aspectos esenciales de la participación productiva en el ámbito económico, cívico, político y social del siglo XXI. Como consecuencia, la promoción internacional de estas competencias adquiere una importancia única en el espectro de la educación infantil, básica y secundaria en USA. El conjunto de nuevos objetivos para estudiantes de hoy implica el desarrollo de nuevas competencias entre docentes que no han sido contempladas hasta ahora en las iniciativas de desarrollo profesional llevadas a cabo en USA, y poco se sabe sobre la adquisición de estas competencias entre educadores. Estas competencias pueden entenderse según el modelo de competencia comunicativa intercultural de Byram (1997), cuyos principios de desarrollo se basan en señalar el aprendizaje on-line como una herramienta eficaz para la adquisición de competencias entre docentes. En este artículo se presenta el análisis de varios estudios sobre el aprendizaje intercultural; aprendizaje intercultural y tecnología; y el desarrollo profesional on-line de profesores, con el fin de plantear la posibilidad de las tres dimensiones. En suma, se nos ofrece una serie de principios sobre el diseño educativo que promueven la construcción de estas competencias interculturales en los profesores, entre los que destaca la evidencia de que las tecnologías en red aplicadas al aprendizaje on-line poseen aspectos únicos para desarrollar las competencias interculturales en todas las áreas.

KEYWORDS

Intercultural, competence, teacher, professional development, on-line, conceptual model, networked technologies.
Competencia, intercultural, docente, desarrollo profesional, on-line, modelo conceptual, tecnologías en red.

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1. Introduction

In the United States, foreign language ability, global awareness, and intercultural communication skills are increasingly recognized as essential dimensions of productive participation in the emerging economic, civic, political and social arenas of the 21st century, and the call to promote these capacities in today's students has been sounded across the spectrum of K16 and higher education, as well as cross-sector organizations concerned with competitiveness in the global economy (American Council on Education, 2007; Partnership for 21st Century Skills, 2009). This newly articulated set of expectations for today's students implies a set of parallel competencies in K16 educators, but little attention has been paid to articulating these competencies for teachers or imagining how to promote them. The most comprehensive understanding of teachers' skills in this arena derives, not surprisingly, from the field of foreign language education, which has been promoting intercultural learning for over a century. Professional preparation documents, such as those prepared by the American Council on the Teaching of Foreign Languages (2002), imagine teachers who are capable of engaging sophisticated and nuanced interactional, interpretive and analytical skills when interacting with members of foreign cultures, conducting cultural investigations, and encountering cultural artifacts or information, as well as capable of designing educational opportunities that promote similar competencies in students. Conceptual writings about culture in the language classroom affirm the knowledge, skills and dispositions explicated in these professional documents (Byram, Nichols & Stevens, 2001; Fox & Diaz-Greenberg, 2006; Kramsch, 2003). While intended as a description of language teachers, this portrait readily applies to teachers of any content area in this global, mobile and multilingual world.

As envisioned, then, teachers who are capable of promoting intercultural competencies possess knowledge of cultures that is deep, deliberate, and constantly evolving, and this knowledge is used in the service of complex communicative and reflective tasks. Teachers are critical, inquisitive and self-aware, and their dispositions reflect a flexible orientation toward the nature of knowledge and experience. They tolerate uncertainty because they are skilled in the process of broadening their perspectives through deliberate investigation of cultural texts and experiences. Byram's (1997) model of «intercultural communicative competence» (ICC) sufficiently encapsulates the capacities expected of effective teachers in this domain by integrating the skills and knowledge required for sophisti-

cated learning about cultures with the dispositions, metacognition and self-awareness required to employ those skills and knowledge in a meaningful way. This model of intercultural competency will be used in this article as a useful proxy for the skills that teachers need in order to develop students as self- and globally-aware, interculturally sensitive, multilingual participants in global societies.

1.1. The promise of online learning for developing ICC (intercultural communicative competence) in teachers

The few existent studies on culture and teachers reveal that they may lack the skills and sense of purpose to teach towards this outcome. Many teachers question the value of targeting culturally-related objectives, have little experience conducting rigorous cultural explorations (Sercu, 2005), or doubt their preparedness to teach in-depth cultural content (Sercu, Mendez & Castro, 2005). Professional development for teachers must adopt a more sophisticated approach that better addresses the skills in culture and pedagogy that teachers require.

Online learning may offer teachers a unique way to meet their professional development needs in the area of ICC. For starters, it could offer a logistically and financially appealing alternative to intercultural travel programs by facilitating teachers' interactions with teachers from other cultures and countries. Beyond overcoming logistical hurdles, online teacher professional development, is increasingly being recognized as a powerful context for teacher learning. Studies of innovations on online TPD (teacher professional development), suggest that online learning can offer teachers opportunities to participate in a professional community, engage in reflective dialog, and build knowledge collectively (Barnett & al., 2002; Wiske & al., 2006). These mechanisms for interaction and community-formation have been widely acknowledged to be effective levers in achieving meaningful, durable impacts of professional development (Hawley & Valli, 1999; Wilson & Berne, 1999). Furthermore, online learning would offer teachers the opportunity to practice and engage their intercultural communication skills within the very technologically-mediated environments that increasingly pervade every sector of our societal participation. It stands to reason that teachers would do well to learn in ways that replicate and reflect the communicative contexts that their students inhabit, indeed the very contexts in which students will apply their emergent intercultural competence.

2. Material and methods

The remainder of this article articulates an analytic framework to guide the development of opportunities for teachers to develop intercultural competence through the incorporation of online learning. It represents the intersection between a seldom-targeted set of skills (intercultural competence), a context (teacher professional development) and a medium (online), all for a specific audience (teachers-as-learners). Little empirical literature investigates this unique intersection; therefore, the following framework integrates key principles from a study of empirical literatures that addresses one dimension or a subset of the dimensions articulated above: intercultural learning, technologically-mediated intercultural learning and online teacher professional development.

3. Results

3.1. Intercultural learning

A review of conceptual work on cultural learning models and study abroad research reveals a consensus about the fundamental principles underlying effective learning that leads to ICC (intercultural communicative competence). First, learners must have contact with the non-native culture under investigation; they must be exposed to authentic cultural products and intercultural interactions, and these interactions should take place in the second language (Lo Bianco, Liddicoat & Crozet, 1999). Learners must actively reflect on their experiences with the non-native culture in order to learn from them. Both experiential and conceptual learning are advocated (Lange, 2003); this combination engages affect and cognition, another essential component of intercultural learning (Byram, 1997). ICC development is recognized as a developmental process that requires time and multiple cycles of learning (Byram & al., 2001; Lange, 2003; Levy, 2007). Many scholars advocate explicit cultural comparisons (Byram, 1997; Lange, 2003). Opportunities for reflection, discussion with peers from both cultures, negotiation of cultural meanings and revisiting prior conceptions are considered fundamental (Lange, 2003; Levy, 2007; Lo Bianco & al., 1999).

The above-mentioned processes are rigorous, time-consuming, logistically difficult, and potentially contentious. Cultural information and artifacts are not always readily available in local learning contexts. Regular, sustained contact with members of non-native cultures can be difficult to find and orchestrate. Furthermore, productive discussions and reflections do not simply result automatically from the provision of opportunities for intercultural interaction (De Nooy & Hanna, 2003). They require deliberate cultivation. Finally, we don't naturally see ourselves as cultural beings; because we are immersed in our own culture, we remain unconscious of it and can project our frame of reference onto others (Kramsch, 1993).

3.2. Technologically-mediated intercultural learning

The careful design of learning experiences that address the demands and challenges of ICC develop-

> ICC-related online TPD should reflect, in its design, organization, and implementation, an awareness of the cultural dimensions of technologies and of communication. Furthermore, communications and learning activities should capitalize on technologies' ability to provide access to various resources, time for reflection, archived communications, and peer-to-peer discussion and feedback.

ment would seem to benefit from the smart incorporation of networked technologies. The most obvious advantages are the bridging of geographic distances to connect learners from different backgrounds, as well as the access to examples of abundant sources of cultural content. The following summary includes a discussion of the educational design features that have been shown to promote ICC-related outcomes and the contributions of the Internet and networked communications to enhance those strategies. Consistent with trends in FL (foreign language) education research, the vast majority of these studies occurred in traditional undergraduate language classes (not teacher preparation or professional development) that practiced some form of telecollaboration, in which two classrooms collaborate for mutual linguistic and cultu-

ral learning. Findings are presented in terms of relevant categories of Byram's model of ICC (intercultural communicative competence), with acknowledgement that the categories themselves are fluid, and learning gains often overlap distinct categories.

In addition to straightforward cultural information, knowledge about discourse, communication processes, and cultural variety has been cultivated through Internet-based learning. In just one example, Osuna (2000) found that the abundance of text, video, and

with C2 members from another culture benefitted from having access to multiple and contradictory views. Second, time for deliberation and reflection promoted learning from the various cultural viewpoints represented. Given the importance of cultural comparisons and reflection for intercultural learning, this finding hardly surprises. What bears mention is how the pace of asynchronous communications like email and online discussion boards supported the reflection process. For example, in O'Dowd's (2006) study of a German-American partnership, students used email to compose thoughtful, in-depth descriptions of their own culture for their tele-collaborators, which stimulated reflection and sustained dialog throughout the semester. The author argues that such deliberation would be unlikely to occur in synchronous communication, where reactions are necessarily more immediate. Together these studies confirm the importance of creating opportunities for reflection and dialog on multiple cultural perspectives, while highlighting the advantage that asynchronous communications can lend to the reflective dialog process.

> While this analysis has demonstrated a potent match between the affordances of technologies and the processes of ICC development, it has shown the equal importance of careful educational design choices and facilitation to assure that technology promotes rather than undermines the goals of ICC. Many ICC studies offered examples of learners that developed their ICC skills by engaging in experiences that forced them to surface their own views, look clearly at them, reflect on them individually, consider alternative perspectives in dialog with others, and revise ideas. Layers of deliberate, structured reflection on cultural information, perspectives and experiences, from the vantage points of learners and teachers, allowed program participants to distance from and evolve their beliefs.

Intercultural tele-collaborations provided opportunities for students to practice and improve their skills of discovery and interaction. Students' innate possession of these skills varied significantly; while

audio resources on the Internet helped students to build deep understandings about cultural topics. Technology facilitated knowledge construction by providing abundant resources and examples of language, culture and discourse, a finding echoed in many studies (Furstenberg & al., 2001; O'Dowd, 2003, 2007; Ware & Kramsch, 2005).

Two main stories emerged from studies that showed gains in skills of interpreting and relating (Bauer & al., 2006; Furstenberg & al., 2001; O'Dowd, 2006; Osuna, 2000; Schneider & von der Emde, 2006). First, students who used the Internet to build cultural knowledge or who participated in tele-collaborations

some students may be naturally predisposed to enact and maintain an ethnographic stance during intercultural dialog, many are not (Bauer & al., 2006; Belz & Muller-Hartmann, 2003; Furstenberg & al., 2001; Hanna & de Nooy, 2003; O'Dowd, 2003, 2006). These skills become even more important in networked communication, where many interactions lack the nonverbal signals that promote understanding (Schneider & von der Emde, 2006). Belz and Muller-Hartmann (2003) found that even professors who are committed to goals of intercultural learning might display ethnocentrism under the stress of real-world tasks, such as tele-collaborating to coordinate an exchange

for their students' benefit. Promoting these skills is paramount to the ICC learning enterprise. In email exchanges, Bauer & al. (2006), O'Dowd (2003), and Schneider and von der Emde (2006) discovered associations between the written characteristics of an ethnographic stance (such as requests for personal perspectives or encouragement to write more) and gains in cultural awareness and perspective-shifting. Conversely, an absence of an ethnographic approach often led to miscommunication, tension, or disengagement (O'Dowd, 2003; Schneider & von der Emde, 2006; Ware & Kramsch, 2005).

Together, these studies suggest that learners might benefit from several design features: explicit instruction in how to communicate respectfully and ethnographically, opportunities to study both satisfying and dissatisfying communications, and periodic self-assessments to appraise one's skills in conducting intercultural inquiry. The archival nature of technologically-mediated communication would facilitate these processes and afford students the access and time to reflect thoughtfully on communications, to compose appropriate messages, and to process emotional reactions to potentially contentious writings from others. However, the technologies that facilitate these interactions cannot be assumed to embody universal «cultures-of-use» (Thorne, 2003); technologies' purposes and use can differ according to cultural context and, consequently, constrain communication. Shih and Cifuentes (2003) argue that the invisibility of the culture-of-use of the technology indicates a need for explicit instruction in these potential obstacles to communication, in other words, to treat the context for communication as an object of study.

In most of the tele-collaborations, increased cultural understanding generated students' curiosity and openness to further exploration, which in turn promoted their continued engagement in a process of cultural discovery. Conversely, attitudes of favorability were undermined by interactions that somehow went wrong, which fortified negative stereotypes and/or built resistance to further intercultural learning (Bauer & al., 2006; O'Dowd, 2003; Shih & Cifuentes, 2003; Ware & Kramsch, 2005).

O'Dowd (2003) and Schneider and von der Emde (2006) discovered the importance of careful topic selection (Spanish bullfighting and school violence, respectively) in exciting students' interests and passion, motivating them to explain carefully and rigorously their perspectives. Grappling in writing with those explanations increased their metacognitive and critical awareness of culture by showing them the dif-

ficulty of articulating tacit cultural beliefs. In a cautionary tale about the potential downside of emotional topics, Ware and Kramsch (2005) found that, in the absence of an ethnographic stance to ground discussions of the American military presence in Germany, some German-American email collaborations deteriorated due to students' insufficient communicative skills for negotiating conflicting perspectives on the topic. However, these miscommunications or conflicts can foster development of metacognition and cultural awareness if the incidents are interrogated, especially via close analysis of textual interactions (Belz, 2003; Schneider & von der Emde, 2006). Schneider and von der Emde (2006) advocate including ICC models like Byram's (1997) as explicit course content to help students consider their lived experiences in relation to formal knowledge on the topic.

In addition to archiving public miscommunications, asynchronous communication and its pace seem to offer support for metacognitive development about the process of communication. An additional benefit of archived online communication is that it allows conflict analysis to occur long after the emotions of the encounter have dissipated.

Additional design considerations are offered by studies of the Cultura Project, a highly structured, carefully sequenced approach to ICC development that has generated durable gains across multiple dimensions of ICC (Bauer & al., 2006; Furstenberg & al., 2001). First, it begins with rigorous exploration of the self before the students share this exploration with tele-collaborators and compare their findings with formal texts such as films or readings. The authors argue that, through this iterative cycle of revisiting and revising cultural understandings against an increasingly complex landscape, students gradually build their understanding and communication skills over time. Second, such a process relies on a highly competent instructor to guide students through the delicate processes of interpreting contradictory perspectives, synthesizing information, refraining from judgment, and developing rich points of inquiry. The teacher must model the intercultural inquiry process herself, in part by positioning herself as co-learner, co-investigator, and co-ethnographer.

3.3. Online teacher professional development

A fairly robust set of design guidelines for ICC development can be based simply on findings from the prior sections. This section offers useful refinements and degrees of emphasis within this emerging set of design considerations that focus on the unique needs

of teachers-as-learners, given that teachers' ultimate objective is to be able to promote intercultural competencies in students.

There is a great deal of overlap between the online intercultural learning studies and the online TPD studies (teacher professional development), not only about how networked technologies support such mechanisms as public dialog, reflection, and metacognition, but also regarding the challenges of promoting sufficient depth and engagement in those processes to advance understanding (Barnett & al., 2002; Celentin, 2007). To a degree, overlap in findings between these bodies of literature should be expected, since the basic principles of ICC development and teacher development themselves greatly overlap. In their articulation of principles for effective teacher professional development, for example, Lieberman and Wood (2001) describe essentials of teacher learning that strongly mirror those that have been discussed herein as conducive to ICC development. The following table, in comparing those essentials, illustrates the synergy between them, including details related to interaction between primary cultures (C1) and secondary cultures (C2).

Other guidelines or models for adult or teacher learning converge around these ideas. Eraut (1994) highlights how, for adults in the professions (including teaching), traditional academic learning results in few changes to practices and beliefs if there is no concomitant opportunity for real-world application of that learning. For developing professional competencies, practicing knowledge (doing) and acquiring knowledge (learning) are the same thing. Eraut's idea of doing-as-learning recalls Byram's (1997) suggestion that much of learning ICC is simply having the chance to practice it. Effective online TPD programs for educators have enacted this doing-as-learning equation by teaching (as explicit content) and modeling (in course design and delivery) the targeted pedagogical skills, giving teachers the chance to experience a technique and reflect on it

from two vantage points, that of learner and teacher (Dooly, 2007; Muller-Hartmann, 2006).

Of particular note are two programs related to culture, the first being Dooly's (2007: 70) study of international English teachers-in-training, who co-designed lesson plans in intercultural groupings. By undergoing the task of negotiating norms of participation in their lesson plan groups, they developed an understanding of how that process happens. As they gained insight into the role of the learner in intercultural telecollaboration, they gradually shifted their perspective about the role of the facilitator, becoming «more aware of their role in determining the process, thus lessening their expectations of the teacher as knowledge facilitator». The second is a rare study of an online program to enhance teachers' capacity to teach ICC (intercultural communicative competence). Muller and Hartmann (2006) studied a unique two-tiered telecollaboration, in which one group of German English-teachers-in-training (the top tier) involved in a telecollaboration observed and studied a second telecollaboration between other German English-teachers-in-training and American German language students (the bottom tier). The top level group studied both the intercultural learning demonstrated in the exchange of the bottom tier and the pedagogy modeled within, all while experiencing their own telecollaboration. Through a series of design features that have emerged in this analysis (e.g., multiple instances of reflection, public dialog about academic and real-world knowledge, collaborative tasks, analysis of transcripts for miscommunications), the top level learners built their capacity to teach ICC. Having experienced and studied various dimensions of ICC development, including its logistical, pedagogical and social challenges, the teachers reported feeling empowered and capable of teaching ICC in their own classrooms.

Finally, Garrison and Anderson's (2003) comprehensive and compelling model for adult e-Learning

Teacher professional development	ICC development
«Teacher's knowledge is the starting place for learning» (p. 181)	Students have unique C1 knowledge and perspectives; investigation of C1
«Teachers learn from…having [their work] discussed and critiqued by a group of peers» (p. 181)	Dialogs with C1 and C2 peers help learners advance ICC-related understandings
«Nonideological» methods and means for learning (p. 183) are recommended	Techniques of ethnographic interviewing and suspension of judgment are advised
View of teaching as «messy, uncertain, and unfinished» (p. 183)	View of intercultural inquiry as ongoing process; inclusion of reflective cycles
«Teachers learn by…seeing the world through different perspectives» (p. 184)	Exposure to multiple and varied C1 and C2 perspectives

Table 1. Comparison of principles for intercultural and teacher professional development.

aligns well with the dimensions of effective TPD (teacher professional development) that were identified by Lieberman and Wood (2001) at the beginning of this section. The difference between the two frameworks is that Garrison and Anderson's is a framework for e-Learning rather than face-to-face learning. Garrison and Anderson (2003) propose a highly specific model to guide engagement in e-Learning among adults. Briefly, this model promotes cycles of what they term practical inquiry. The term 'practical' refers to the importance of grounding learning in real-world events and lived experiences, a widely accepted tenet of adult learning (Kolb & Fry, 1975). 'Inquiry' encapsulates the ongoing, cyclical nature of knowledge development, in which adults engage in both individual reflection and collective negotiation of ideas, supported by the affordances of asynchronous technologically-mediated communication.

4. Discussion

The above studies offer ways of attending to the unique challenges that emerge when teachers are the learners in an educational experience designed to develop their intercultural competence. These include: incorporating practical applications of learning, such as the design of lesson plans in dialog with others; grounding all learning activities in reflective communities; inviting reflection from the dual perspectives of teacher and learner; drawing learners' careful attention to the pedagogies that are modeled in the delivery of the professional development; and ensuring the collaboration of mindful facilitators whose participation models and cultivates a critical, reflective community.

Collectively, the studies of ICC development and of online TPD (teacher professional development) suggest a real synergy between technology, teacher-learners, effective teacher professional development, and the processes of ICC development. Teacher growth and ICC development both require the shifting of perspectives, which requires reflections on multiple and often contradictory experiences. Networked technologies seem a logical choice of medium for the way they display, juxtapose, and archive the language through which we communicate and learn, and the perspectives – cultural or pedagogical – that we reveal through that language. By facilitating intercultural interactions, providing mechanisms to support cycles of reflection and meta-reflection over time, and forcing attention to communicative and learning processes, networked technologies could effectively promote teachers' ICC and related pedagogical capacity.

While this analysis has demonstrated a potent match between the affordances of technologies and the processes of ICC development, it has shown the equal importance of careful educational design choices and facilitation to assure that technology promotes rather than undermines the goals of ICC. Many ICC studies offered examples of learners that developed their ICC skills by engaging in experiences that forced them to surface their own views, look clearly at them, reflect on them individually, consider alternative perspectives in dialog with others, and revise ideas. Layers of deliberate, structured reflection on cultural information, perspectives and experiences, from the vantage points of learners and teachers, allowed program participants to distance from and evolve their beliefs. By studying the way intercultural communication unfolded, students became better intercultural learners. By studying the way that intercultural learning was orchestrated, teachers became better intercultural teachers.

4.1. Hypothesized principles of effective TPD (teacher professional development)

The previous sections described how three bodies of literature yield understandings about how teacher professional development could best promote the knowledge, skills and dispositions that characterize effective teachers of intercultural competencies. They also articulated (a) the propitious overlaps between the processes of ICC development and teacher development, (b) the benefits that could emerge from conducting ICC-related professional development online, and (c) insights about how online learning could support the facilitation of ICC and teacher development processes simultaneously.

Integration and synthesis of these discoveries suggests a set of beginning principles that this author argues should be incorporated into professional development opportunities for teachers that target the improvement in their intercultural competence as well as their ability to cultivate similar competencies in their students. Indeed, the teachers might be from any subject area, and the professional development might take any number of forms. The key is to find opportunities to build all teachers' intercultural competencies, and to look for opportunities to integrate some form of ICC development into existing or new professional development opportunities. Whatever the format, organizing those TPD (Teacher professional development) opportunities – be they single activities, entire courses, or something else — around the following principles would both respond to teachers' needs for develop-

ment in this area and maximize the unique benefits that online learning has to offer teacher-learners for the purposes of ICC development:

• Multiple perspectives: Teacher-learners should have opportunities to interact with abundant and varied cultural perspectives, representations, and representatives from one's own and target culture(s).

• Reflective cycles: Teacher-learners should have opportunities to engage in deliberately orchestrated, multiple cycles of reflection over time, on both experiences and formal concepts related to culture, as well as pedagogies for the teaching of ICC.

• Ethnography: Teacher-learners should have opportunities to see, experience, learn about, and develop an ethnographic stance toward intercultural inquiry, including the opportunity to reflect on ethnographic stances enacted during the TPD itself.

• Metacognition: Teacher-learners should have opportunities to see, experience, learn about, and develop metacognition about intercultural learning, including the opportunity to reflect on their learning processes during the TPD itself.

• Technology: ICC-related online TPD should reflect, in its design, organization, and implementation, an awareness of the cultural dimensions of technologies and of communication. Furthermore, communications and learning activities should capitalize on technologies' ability to provide access to various resources, time for reflection, archived communications, and peer-to-peer discussion and feedback.

References

AMERICAN COUNCIL ON THE TEACHING OF FOREIGN LANGUAGES (Ed.) (2002). *Program Standards for the Preparation of Foreign Language Teachers*. (www.actfl.org/files/public/ACTFLNCATEStandardsRevised713.pdf) (06-04-11).

AMERICAN COUNCIL ON EDUCATION (2007). *Annual Report*. Washington, DC: American Council on Education.

BARNETT, M.; KEATING, T. & al. (2002). Using Emerging Technologies to Help Bridge the Gap between University Theory and Classroom Practice: Challenges and Successes. *School Science & Mathematics, 102 (6)*; 299-313.

BAUER, B.; deBENEDETTE, L. & AL. (2006). The Cultura Project. In BELZ, J.A. & THORNE, S.L. (Eds.). *Internet-mediated Intercultural Foreign Language Education*. Boston: Thomson Heinle; 31-62.

BELZ, J.A. (2003). Linguistic Perspectives on the Development of Intercultural Competence in Telecollaboration. *Language Learning & Technology, 7(2)*; 68-117.

BELZ, J.A. & MULLER-HARTMANN, A. (2003). Teachers as Intercultural Learners: Negotiating German-American Telecollaboration along the Institutional Fault Line. *Modern Language Journal, 87(1)*; 71-89.

BYRAM, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Clevedon, Philadelphia: Multilingual Matters.

BYRAM, M.; NICHOLS, A. & STEVENS, D. (Eds.). (2001). *Developing Intercultural Communicative Competence in Practice*. Clevedon, England: Multilingual Matters.

CELENTIN, P. (2007). Online education: Analysis of Interaction and Knowledge Building Patterns Among Foreign Language Teachers. *Journal of Distance Education, 21(3)*; 39-58.

DE NOOY, J. & HANNA, B.E. (2003). Cultural Information Gathering by Australian Students in France. *Language and Intercultural Communication, 3*; 64-80.

DOOLY, M. (2007). Joining forces: Promoting Metalinguistic Awareness through Computer-supported Collaborative Learning. *Language Awareness, 16(1)*; 57-74.

ERAUT, M. (1994). *Developing Professional Knowledge and Competence*. Bristol, PA: Falmer Press.

FOX, R.K. & DIAZ-GREENBERG, R. (2006). Culture, Multiculturalism and Foreign/World Language Standards in U.S. Teacher Preparation Programs: Toward a Discourse of Dissonance. *European Journal of Teacher Education, 29(3)*; 401-422.

FURSTENBERG, G.; LEVET, S. & al. (2001). Giving a Virtual Voice to the Silent Language of Culture: The Culture Project. *Language Learning & Technology, 5(1)*; 55-102.

GARRISON, D.R. & ANDERSON, T. (2003). *E-learning in the 21st Century: A Framework for Research and Practice*. London: Routledge Falmer.

HANNA, B.E. & de NOOY, J. (2003). A Funny Thing Happened on the Way to the Forum: Electronic Discussion and Foreign Language Learning. *Language Learning & Technology, 7(1)*; 71-85.

HAWLEY, W. & VALLI, L. (1999). The Essentials for Effective Professional Development: A new Consensus. In DARLING-HAMMOND, L. & SYKES, G. (Eds.). *Teaching as the Learning Profession: Handbook of Policy and Practice*. San Francisco: Jossey Bass; 127-150.

KOLB, D.A. & FRY, R. (1975). Toward an Applied Theory of Experiential Learning. In COOPER, C. (Ed.). *Theories of Group Process*. London: John Wiley; 33-57.

KRAMSCH, C. (1993). *Context and Culture in Language Teaching*. Oxford: Oxford University Press.

KRAMSCH, C. (2003). Teaching Language along the Cultural Faultline. In LANGE, D.L. & PAIGE, R.M. (Eds.). *Culture as the Core: Perspectives on Culture in Second Language Learning*. Greenwich, CT: Information Age Publishing; 19-35.

LANGE, D.L. (2003). Implications of Theory and Research in Second Language Classrooms, in LANGE, D.L. & PAIGE, R.M. (Eds.). *Culture as the Core: Perspectives on Culture in Second Language Learning*. Greenwich, CT: Information Age Publishing; 271-336.

LEVY, M. (2007). Culture, Culture Learning and new Technologies: Towards a Pedagogical Framework. Language *Learning & Technology, 11(2)*; 104-127.

LIEBERMAN, A. & WOOD, D. (2001). When Teachers Write: Of Networks and Learning. In LIEBERMAN, A. & MILLER, L. (Eds.). *Teachers Caught in the Action: Professional Development that Matters*. New York: Teachers College Press; 174-187.

LO BIANCO, J. LIDDICOAT, A.J. & CROZET, C. (Eds.). (1999). *Striving for the Third Place: Intercultural Competence through Language Education*. Melbourne: Language Australia.

MULLER-HARTMANN, A. (2006). Learning How to Teach Intercultural Communicative Competence via Telecollaboration: A Model for Language Teacher Education. In BELZ, J.A. & THORNE, S.L. (Eds.). *Internet-Mediated Intercultural Foreign Language Education*. Boston: Thomson Heinle; 63-84.

O'DOWD, R. (2003). Understanding the «Other Side»: Intercultural Learning in a Spanish-English E-mail Exchange. *Language Learning & Technology, 7(2)*; 118-144.

O'DOWD, R. (2006). The Use of Videoconferencing and E-mail as Mediators of Intercultural Student Ethnography. In BELZ, J.A. & THORNE, S.L. (Eds.). *Internet-mediated Intercultural Foreign Lan-*

guage Education. Boston: Thomson Heinle; 86-120.

O'DOWD, R. (2007). Evaluating the Outcomes of Online Inter-cultural Exchange. *ELT Journal: English Language Teachers Journal*, *61(2)*; 144-152.

OSUNA, M. (2000). Promoting Foreign Culture Acquisition via the Internet in a Sociocultural Context. *Journal of Educational Computing Research*, *22(3)*; 323-345.

PARTNERSHIP FOR 21ST CENTURY SKILLS (2009). *P21 Framework Definitions*. Tucson, AZ: The Partnership for 21st Century Skills.

SCHNEIDER, J. & VON DER EMDE, S. (2006). Conflicts in Cyberspace: From Communication Breakdown to Intercultural Dialogue in Online Collaborations. In BELZ, J.A. & THORNE, S.L. (Eds.). *Internet-mediated Intercultural Foreign Language Education*. Boston: Thomson Heinle; 178-206.

SERCU, L. (Ed.). (2005). *Foreign Language Teachers and Intercultural Competence*. Clevedon (UK): Multilingual Matters.

SERCU, L.; MÉNDEZ, M. & CASTRO, P. (2005). Culture Learning from a Constructivist Perspective: An Investigation of Spanish Foreign Language Teachers' Views. *Language and Education*, *19(6)*; 483-495.

SHIH, Y.C. & CIFUENTES, L. (2003). Taiwanese Intercultural Pheno-mena and Issues in a United States-Taiwan Telecommunications Partnership. *Educational Technology, Research & Development*, *51(3)*; 82-90.

THORNE, S.L. (2003). Artifacts and Cultures-of-use in Intercultural Communication. Language Learning & Technology, 7(2); 38-67.

WARE, P.D. & KRAMSCH, C. (2005). Toward an Intercultural Stance: Teaching German and English through Telecollaboration. *Modern Language Journal*, *89(2)*; 190-205.

WILSON, S.M. & BERNE, J. (1999). Teacher Learning and the Acquisition of Professional Knowledge: An Examination of Research on Contemporary Professional Development. *Review of Research in Education*, *24*; 173-209.

WISKE, M.S.; PERKINS, D. & EDDY SPICER, D. (2006). Piaget Goes Digital: Negotiating Accommodation of Practice to Principles. In DEDE, C. (Ed.). *Online Professional Development for Teachers: Emerging Models and Methods*. Cambridge, MA: Harvard Education Press; 49-68.

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Pedagogy of Interactivity

Pedagogía de la interactividad

ABSTRACT

This paper analyzes the pedagogy of transmission, with its unidirectional nature and features that it has in common with traditional media, and the pedagogy of interaction, one of participation, dialogue and co-authorship which harmonizes with the principles of Web 2.0. New media have implemented new communication models that allow every citizen to become a potential media communicator. This communicative ecosystem suggests a society of communicators in which everyone feeds each other with his or her creations and shares individual and collective knowledge. We review communication practices that utilize feedback as a strategy of interaction, when in fact these practices still favor the perspective of the sender. We then propose a model for the collective power of knowledge called the «feed-feed model», based on the individual and collective construction of knowledge. This knowledge, which can be organized in a virtual or real setting, characterizes the fundamental principles of interactivity, even though some sectors still view these as marketing strategies. We examine the virtual silence that exists in the culture of participation, and its implications for educommunication. The article concludes with a search for other pedagogical models, and the analysis of the consequences of perpetuating the transmission model in the face of the possibilities offered by the pedagogy of interaction.

ABSTRACT (Spanish)

En este artículo se analizan la pedagogía transmisiva, caracterizada por su sentido unidireccional, que tiene algunos rasgos comunes con los medios de comunicación, y la pedagogía interactiva, caracterizada por la participación, el diálogo, la coautoría que tiene rasgos comunes con los principios de la Web 2.0. Los nuevos medios ponen en práctica modelos comunicativos que permiten que cada ciudadano pueda ser, potencialmente, un medio de comunicación. Este ecosistema comunicativo permite pensar en una sociedad de comunicadores donde todos alimentan con sus creaciones y participaciones los saberes individuales y colectivos. Se hace una revisión de las prácticas comunicativas que utilizan la retroalimentación (feed-back) como estrategia de interacción, cuando en verdad no dejan de ser un refuerzo planteado desde la óptica del emisor, y se ofrece una propuesta centrada en la alimentación de saberes colectivos que denominamos «modelo feed feed», basado en la participación individual y colectiva para la construcción de conocimientos. Estos saberes, que pueden organizarse presencial o virtualmente, caracterizan los principios fundamentales de la interactividad, que para algunos sectores no deja de ser una estrategia de marketing. En la cultura de la participación se hace referencia al silencio virtual y a sus consecuencias en el campo de la educomunicación. El artículo concluye con la búsqueda de otros modelos pedagógicos, y con el análisis de las consecuencias que implicaría seguir reproduciendo el modelo transmisivo frente a las posibilidades que ofrece la pedagogía de la interactividad.

KEYWORDS

Transmission, participation, interactivity, virtual silence, feed-feed model, culture of participation, knowledge.
Transmisión, participación, interactividad, silencio virtual, modelo feed-feed, modelos comunicativos.

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1. Introduction

In the majority of face-to-face or virtual courses it is the information transmission model that predominates. Virtual learning spaces are static and still centered on data distribution methods that eschew interactivity and collaboration in their set-up, not to mention constructed and connected learning.

Pedagogy based on learning by memory and repetition is widely questioned but little has been done to modify the practice. Now, adding to the tradition of pedagogical criticism, come the cognitive and communicative demands of a generation raised on cyberculture.

In online education, the teacher continues to treat the student as a receiver of information and not as collaborative agent. He fails to recognize exchange and co-creation, which are pervasive practices in cyberspace. He continues to use the «logic of distribution» that is a common feature of the mass media and fails to tap into the communicative potential of the Web. Discussion rooms and e-mail may exist but the level of interaction is poor, and the transmission and analogical model still influences the digital conversational context.

This article adopts a critical stance towards the communication model that holds sway in face-to-face and virtual education in order to propose strategies of organization and functioning for mediation that will allow the actions of students and teachers to be redefined as agents in the learning and communication process, in harmony with the Net's communicational dynamic.

2. The pedagogy of transmission

Since the second half of the 20th century the pedagogical transmission model has been under attack for its one-way or false two-way transmission based on functionalist models of communication that divide senders from receivers, and in which feedback is nothing more than sender reinforcement. McLaren and Kincheloe (2008) propose a dialectic transformation that affects all actors in educommunication which requires the development of knowledge self-management systems. Along these lines, Kaplún (1998) stated that learning only really exists when there is a process; when the student manages his own learning.

More than 40 years ago, Porcher (1967: 24) was already pointing out that schools were educating students for a world that no longer existed. This situation has deteriorated over the years to the point where we now have the notion of «the school as museum» with its teaching of the usual prevailing culture, as opposed to the idea of education taking place outside the classroom and beyond school culture.

The predominant school system today is based on industrial society logic in which the school's principles are still centered on manufacturing and the teaching-learning processes defined by Illich (2002: 43), as if school was «an assembly line of 30 to 50 individuals around a central figure who determines what is, and what is not, education». For Tapscott (2010), the pedagogical model that still operates today was conceived within the context of the industrial society which needed operators who did what was required of them in a fragmented mass production process.

This model based on mass learning differs substantially from learning environments in which other pedagogical and communicative practices are developed. Tapscott states that the end of the 20th and start of the 21st century witnessed the spread of pedagogical practices focused on the student and based on collaboration and solidarity between students. This author compares some of the features of the model based on mass learning and the model based on interactive learning.

Various authors (Silva, 2010; Tapscott, 2010; Santaella & Lemos, 2010, Aparici, 2010) declare that the industrial pedagogical model is so deeply rooted in daily teaching practice that a real change will be a long time in coming. Computers and the Internet are still used according to an educational system in which it is teachers who transmit content. This hegemonic transmission paradigm is countered by a dialogical practice that is gaining ground outside the classroom. Aubert et al. (2008: 31) describe this situation thus: «In today's information society, it is thanks to dialogue with «non-experts» that more inclusive scientific theories have been developed. No expert exists who possesses all the social and cultural knowledge required to make proposals that are fit for all. We can all contribute ideas based on our various experiences and cultural

Mass learning	Interactive learning
Teacher-centered	Student-centered
Standardized, *en masse*	Personalized
Instruction: teach something to be learned	Discovery: learning to be
Individualistic learning	Collaborative learning

Tapscott (2010: 163).

resources». They add that this «phenomenon of questioning the monopoly of knowledge has been described as the demonopolization of expert knowledge».

Similarly, García Canclini (2007) indicates that dialogic communication via virtual networks changes the way people relate to and meet up with each other, how they love and learn to be loved, or at least imagine how they do.

3. The «feed-feed model»

The hegemonic communication model applied by conventional media and educational systems is centered fundamentally on the sender-receiver-message relation. The basic principles of this model combine the concept of feedback between the participants in a model that establishes a division between the senders and receivers. Feedback acts as a strengthening of the messages from the information source and reproduces the pathway and guidelines of the message. This model is evident in the media from the starting point of audience loyalty to a medium, program-product, etc, and in education, in which the information pathways laid down by teachers and / or text books are followed or reproduced.

For many years, feedback has been seen as the interaction between sender and receiver, and the communicative relations between participants are analyzed based on those pre-established and predetermined responses. But the feedback idea is developed, designed and articulated from the viewpoint of those who provide the information.

Feedback is seen as one of the principles of the functionalist models of communication and the pedagogy of transmission. The type of interaction established between all the participants is fixed beforehand, and serves to inform of the «success» of the objectives proposed by the sender. This model does not take into account that all the participants can be subjects of the message, and can set up a sender community in which they interrelate, each with the same communicative status as the others.

The current communicative context can be described as a «feed-feed model» (Aparici, 2011) in which all the participants in the communicative process feed each other in terms of communication and information. Rather than being a process of message reinforcement, it must be understood as an act of construction and connection between all «Internauts» in which there are no divisions of any kind, all participants having the same rank and status regardless of the type of messages and proclamations they make.

Several similar ideas emerged that predated the construction of a different communication model to integrate the subjects of communication. In 1973, Jean Cloutier presented his «emirec» theory of an individual who is simultaneously a sender and receiver. In

> Radically different from television which is a restrictive, centralizing machine designed to transmit information manufactured by a production center, the Net is an open space for users to interact, allowing for authorship and co-creation in the exchange of information and the construction of knowledge. This socio-technical landscape sees the transition from the information logic of the «one-to-all» model (transmission model) to the communication logic of the «all-to-all» model (interactive model).

1980, Alfin Toffler coined the term «prosumer» for a person who was both producer and consumer of messages. Although both ideas set important precedents for the construction of an alternative model of communication, they separated sending from reception, and production from consumption.

The new media contain a communication and information ecosystem of a different order in which all individuals are potential senders who can continually create content and interrelate on the basis of conversational participation instituted by the senders themselves in, and with, the various communication tools.

The Web is not a medium for the transmission of information like television, the press or the radio. It is a medium for immersion and the control of mobile windows, open multiple connections between content

and those who interact, those who are geographically dispersed and who can carry out collaborative actions and meetings that are synchronic and asynchronic, far beyond the time and space relations to which conventional media are bound. The digital scenario is a field of possibilities for interaction based on sounds, images and text. Its existence conveys the freedom to interact, create and recreate new possibilities for representation and navigation in many different directions.

Understood as such, the Web enables the pre-established size and categories of messages, sending

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and reception to be changed, together with the distribution and diffusion of the packages of information articulated in a structure that goes from A to B or from A in B, so typical of the conventional media traditionally used in distance learning or in face-to-face teaching.

In the context of the conventional «communication» media, the message is one-way and closed since reception is separated from production. In this model, the sender is a subject, an institution or group that invisibly imposes on the receiver's mental universe, imaginary world and his representational construction, in which the receiver maintains an unequal relationship with the sender, one based on passive assimilation removed from the message.

The logic of mass transmission loses its validity in the digital environment, which is shaped by the recent social and technological transformations and by the old role of the spectator now transformed into one of par-

ticipant in the processes of communication and production.

Various authors (Martínez Pandiani, 2008; Lemos & Levy, 2010; Shirky, 2011) point out that in recent years there has been a migration away from the TV screen to multiple screens that enable different degrees of participation in which users can intervene, manage and interact, and create and feed their communicative experience. In this communication ecosystem, the subject can create and control the interaction processes with information and interface management tools.

Radically different from television which is a restrictive, centralizing machine designed to transmit information manufactured by a production center, the Net is an open space for users to interact, allowing for authorship and co-creation in the exchange of information and the construction of knowledge. This socio-technical landscape sees the transition from the information logic of the «one-to-all» model (transmission model) to the communication logic of the «all-to-all» model (interactive model). This is a profound change in the classic communication scheme based on:

a) An ecosystem of senders that do not broadcast their messages unilaterally.

b) The message no longer simply being sent; it is no longer a closed world, paralyzed, immutable, untouchable, sacred; it is an open world on the Net; it can be modified by anyone who uses it.

c) A transformation of the classic role of the receiver into co-author. This new subject is invited to freely create, and the messages can take on new meaning in the hands of these subjects.

4. Participation and interactivity

Shirky (2011) and Jenkins (2008) stress that creating a participative culture for the common good is much more difficult than sharing photos and music files, etc. To participate normally requires a high degree of connection, commitment, collaboration and solidarity among members of a community. Dussel (2010), citing Ito, notes that there are two types of participation in the new media: one is guided by interest

(groups of fans, for example) and another is influenced by affectivity and friendship. These two modalities can operate simultaneously or independently.

The term «user» does not reflect the new reality we are living in. Its use continues to perpetuate the distinction between editor and consumer. Likewise, authors such as Karp, cited by Vacas (2010), state that those who create blogs or webpages on social networks are editors, and these people behave like professionals regardless of the results. This idea emphasizes the expressive and communicative possibilities that citizens now have, as opposed to the aesthetic and communicative dimensions that for some mean a deterioration of the canons of technical and aesthetic quality.

The «one-to-all» model applied by the conventional media and educational systems will continue to exist for a long time but the dialogical «all-to-all» model in the digital media and the social networks will also gain ground.

According to Lemos and Lévy (2010), the use of social networks consists largely of banal exchanges, but there is an increasing amount of content that raises the quality of information. These authors state that for centuries, «the masses were just that: formless multitudes with no opportunity to produce information or content, forever chained to the role of consumer» (Lemos & Lévy, 2010: 86). Now for the first time, the situation is totally different. They can be authors and producers, but it will take time for them to assume this new creative and productive role.

It is important to note that a society in which everybody has access to the public space and in which each person can potentially become a medium of communication differs from those societies in which the citizens relate to the media only as consumers. The bigger the social network system, the greater the difference between those who are more active and those who are less active in the communicative processes.

4.1. The principles of interactivity

The term «interactivity» became notorious in the 1980s with the expansion and spread of information and communication technologies (ICT). The concept of interactivity means:

a) User intervention in the content.

b) Transformation of the spectator into actor.

c) Individualized dialogue with the connected services.

d) Reciprocal actions in dialogical mode with the users, or in real time with the devices (each communicator responds to another or to the other communicators).

The highest concept of interactivity is associated to the greatest acceptance of communication. The two terms can be synonymous: the term «interactive communication» would be redundant were it not for the need to accurately describe «communication», since to communicate does not mean to transmit or to manipulate (Silva, 2005).

Santaella (2007) says that interactivity in the Net enables us to access information at a distance that is non-linear, to send messages that remain available for receiving with no hierarchical values, to carry out collaborative actions and act in remote places, to visualize faraway spaces, to coexist within real and virtual contexts, to belong to and interact within virtual environments via different immersion processes. There are three basic principles of interactivity:

a) Participation-intervention: to participate is not just to respond «yes» or «no» or to choose a predetermined option. It means interfering, intervening in the content of information and modifying a message.

b) Two-directionality-hybridization: communication is the joint production of sender and receiver, it is co-creation; the twin poles of codification and decodification come together as one.

c) Permutability-potentiality: communication means a lot of articulatory networks of connections and the freedom to make changes and associations, and produce multiple meanings.

These principles can cause a rupture in the logic of transmission and open a space for the genuine exercise of participation, that is, sensory-motor, semantic participation that is not only mechanical (Silva, 2005; Aparici, 2010).

We observe how interactivity is now the biggest challenge faced by the mass media because with an increasing number of the public now internauts, they will not confine themselves to being mere receivers, to see, hear, read; they want to interact and be the subject of communication. It is also one of the greatest challenges to the educational system in terms of developing and activating models and practices based on interactivity, because interactivity affects the principles of knowledge construction and the micropolicy of power, and the establishment of new unprecedented forms of teaching and learning at a mass level, except in the case of particular experiences developed by communicators or pedagogues in specific contexts or spaces.

In the past 30 years, the term «interactivity» has passed through various stages:

• A period that produced many theories on the possibilities of creation and user autonomy in the face

of standardized messages. It is important to note that the purged meaning of interactivity goes back to the «participationist» art of the 1960s defined by Umberto Eco as «open work».

• A technocratic period that identified interactivity as the relation of the individual to the machine and its navigational possibilities.

• A period of banalization, when the term «interactivity» was used above all as a marketing strategy to sell products. This period saw the application of the term to the most varied consumer products. There was even talk of being a member of an interactive school just for possessing a computer and Internet connection without having shaken off the transmission pedagogy that characterizes it.

A period of reactivation, of going back to the roots, linked to «hacktivism» and social movements. From 2004, Web 2.0 provided the communicational opportunity to put into action a model and practice that differed from the usual standardized offerings, in which each person could potentially be a medium of communication. From this moment on, the potential of citizen authorship was perceived in which users or consumers could become editors, producers or authors. One could now talk of the gestation of a society of communicators (Aparici, 2011).

There are sectors in society that criticize the term «interactivity» because they identify it with a marketing strategy aimed at influencing public opinion to link the media as «intelligent instruments» or which added something beneficial to the qualities of a product. As well as a «culture industry», many would now also see an industry of interactivity understood as an industry of participation that seeks to guarantee consumer loyalty to a product, to a medium or to a political party.

4.2. Virtual silence

One aspect not usually addressed when speaking of the interactivity of the culture of participation is virtual silence. What Burbules and Callister find most curious about the Internet is its silences. These authors state that many ideas and viewpoints are missing from the Net and many people and groups are not represented. They urge us to «question the Internet given that one of its main features is the illusion that it is all-embracing, and this illusion is so widespread that it is difficult to imagine that something of any importance could be excluded» (Burbules & Callister, 2008: 129-130).

Research by Ilse Gonçalves (2003) into different internaut communities made up of Spanish and Brazilian students communicating at a distance, whose ages ranged from 30 to 45, found a difference between participants who felt the need to integrate, to be dynamic and committed and those who did not participate or offer opinions, and who did not know how or with whom to contribute. One key aspect of this research was to point out that virtual silence is inherited from the transmission model of teaching that helped shape these participants. Some indicated that they had serious problems when trying to interact because they had been educated exclusively to assimilate knowledge, and they recognized that their creative, communicative or expressive dimensions were left underdeveloped by their educational processes.

5. The search for other models and pedagogical proposals

A teacher can establish relations of communication and the production of collaborative knowledge in which everybody learns with everybody else, as opposed to the one-to-all model that rules in education and the media. This means that the dominions of knowledge have to be modeled as conceptual spaces in which students construct their own maps and lead their own explorations, taking content as a starting point and not the finishing point in the process of knowledge construction. Student participation is described as potential states of knowledge that are designed in collaboration. The student is not limited to seeing, hearing, copying and doing examinations. The student creates, modifies, constructs and becomes co-author, and handles a series of elements to enable the construction of collective knowledge.

The teacher offers a range of possibilities and pathways that open up when the students activate communication devices. The teacher ensures the possibility of free plural meanings without discarding coherence and its accompanying critical faculty. The teacher must be open to any extensions and modifications proposed by students. Pedagogy based on that disposition towards co-authorship and interactivity implies the termination of one model of teacher and the birth of another in which the teacher is democratic and expansive in outlook. This means that the teacher must apply his critical faculties to intervention and modification, which implies a dose of humility. This does not mean weakness or a lessening of his authority or vocational impulse. Be it in the classroom or online, the teacher must be aware that knowledge is not centered on the massage or content transmission (Silva, 2010).

In the digital age, the actors in communication are no longer restricted to separate sending and receiving,

a feature of mass media or «written culture» in which the author and reader do not interact directly. A teacher can change the dimension of his authorship by replacing the speak-dictate system based on the one-way distribution of information with a perspective in which the proposition of knowledge is open to the active participation of the students, most of whom have already experienced other models on the Net and on their mobile phones. In sum, a teacher is responsible for mediating in the construction of another kind of thought, reinventing a new architecture of knowledge and, to a certain extent, reinventing the profession of teaching.

6. Conclusions

In this time of conflict and transition for educational systems, we observe that while the school represents sluggishness, reflection, slow action, simultaneous group work and promotes a certain type of individual authorship of production and classification, the new communication ecosystem proposes immediacy, acceleration, emotional shock, intuition, collaborative work, rapid interaction, the individual screen and a form of group authority.

Dussel (2010) examines this dilemma over the meaning of culture inside and outside the classroom by describing four major dimensions that are appropriate for these environments:

a) The school recognizes the function of the individual author while participatory culture and collective production on the Net create other canons regarding the process of co-authorship and collective intelligence.

b) The school promotes the rational over the emotional, while feelings and emotions are what stand out in the social networks.

c) The school shows, sees, verbally defines, while simulation and immersion are the key characteristics of the Net, as technology converges and many and varied languages are integrated.

d) The school centers its knowledge on the teacher, the curriculum and the text book. The Net, meanwhile, is a huge archive, a library of varied knowledge and immeasurable hypertexts.

These two contexts of culture inside and outside the classroom define the crossroads at which educational systems find themselves at the start of this 21st century:

To continue to reproduce the transmission pedagogy that Freire (1985) characterized as a system that dictates ideas in which no real debate or discussion of topics occurs, in which an order is imposed on the student that he does not share and which offers him no means with which to really think because he receives given formulae as if they were cooking recipes, or, to introduce the pedagogy of interactivity in which everyone learns with everybody else in a context of uncertainties that requires all those who participate in a process of real communication to make an effort to recreate and invent. As Kaplún (1998: 51) anticipated, «it is

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only by participating, getting involved, investigating, asking questions and looking for answers, discovering problems and resolving them that we can really attain knowledge. Learning comes from experiencing, creating and inventing, not just from reading and listening. Real learning only occurs when there is a process: when the student manages his own learning».

References

APARICI, R. (Coord.) (2010). Conectados en el ciberespacio. Madrid: Uned.
APARICI, R. (Coord.) (2011). La educación 2.0 y las nuevas alfabetizaciones. Barcelona: Gedisa.
AUBERT, A.; FLECHA, C.; GARCÍA, R.; FLECHA & RACIONERO, S. (2008). Aprendizaje dialógico en la sociedad de la información. Barcelona: Hipatia.
BURBULES, N.C. & CALLISTER, T.A. (2008). Educación: riesgos y promesas de las nuevas tecnologías de la información. Buenos Aires: Granica.
DUSSEL, I. (2010). La educación alterada. Aproximaciones a la es-

cuela del siglo XXI. Córdoba: Salida al Mar.
FREIRE, P. (1985). *Pedagogía del oprimido*. Buenos Aires: Siglo XXI.
FREIRE, P.E & ILLICH, I. (2002). *La educación*. Buenos Aires: Galerna.
GARGÍA CANCLINI, N. (2007). *Lectores, espectadores e internautas*. Barcelona: Gedisa.
GONÇALVES, M.I. (2003). Educación digital. Tesis doctoral. Madrid: Uned.
JENKINS, H. (2008). *Convergence Culture*. Barcelona: Paidós:
LEMOS, A. & LÉVY, P. (2010). *O futuro da Internet*. São Paulo: Paulus.
KAPLÚN, M. (1998). *Una pedagogía de la comunicación*. Madrid: De la Torre.
MARTÍNEZ PANDIANI, G. (2008). *La revancha del receptor. Política, medios y audiencias*. Buenos Aires: Universidad del Salvador.
McLAREN, P. & KINCHELOE, J.L. (2008). *Pedagogía crítica: De qué hablamos, dónde estamos*. Barcelona: Graó.
PORCHER, L. (1976). *La escuela paralela*. Buenos Aires: Kapelusz.
SANTAELLA, L. (2007). *Navegar no ciberespaço. O perfil do leitor imersivo*. São Paulo: Paulus.
SANTAELLA, L. & LEMOS, R. (2010). *Redes sociais digitais. A cognição conectiva do Twiter*. São Paulo: Paulus
SHIRKY, C. (2011). *A cultura da participação*. Río de Janeiro: Zahar.
SILVA, M. (2005). *Educación Interactiva: enseñanza y aprendizaje presencial y online*. Barcelona: Gedisa.
SILVA. M.; PESCE, L. & ZUIN, A. (Org.) (2010). *Educação online: cenário, formação e questões didático-epistemológicas*. Rio de Janeiro: WAK.
TAPSCOTT, D. (2010). *A hora da geração digital*. Rio de Janeiro: Nova Fronteira Participaçoes.
VACAS, F. (2010). *La comunicación vertical. Medios personales y mercados de nicho*. Buenos Aires: La Crujía.

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«Prosuming» across Cultures: Youth Creating and Discussing Digital Media across Borders

«Prosumidores interculturales»: creación de medios digitales globales entre jóvenes

ABSTRACT

The Scratch Online Community enables young people to share their creative digital projects internationally with a level of ease that was impossible only a few years ago. Like all creative communities, Scratch is not just a space for sharing products, work, techniques and tips and tricks, but also a space for social interaction. Media literacy educators have unprecedented challenges and opportunities in digital environments like Scratch to harness the vast amount of knowledge in the community to enhance students' learning. They also have challenges and opportunities to implement a form of digital media literacy education that is responsive to social and cultural representation. One role of digital media literacy is to help young people to challenge unfair and derogatory portrayals of people and to break down processes of social and cultural «othering» so that all community members feel included and safe to express themselves. This article considers how online community spaces like Scratch might draw on social interaction to enhance intercultural understandings and learning through dialogue and creative practice. The article uses statistics to indicate the amount of international interaction in the Scratch community. It then uses qualitative analysis of forum discussions to analyse the types of intercultural interaction that occurs.

ABSTRACT (Spanish)

La «Scratch Online Community» permite a los jóvenes compartir sus proyectos digitales internacionalmente con una facilidad impensable años atrás. Como todas las comunidades creativas de este tipo, no es solo un espacio para compartir productos, trabajos, técnicas o consejos, sino también un espacio para la interacción social. Los educadores del ámbito de la alfabetización en los medios encuentran en estas iniciativas retos y oportunidades sin precedentes para aprovechar el volumen de conocimiento de la comunidad y promover el aprendizaje. Ofrece también oportunidades para implementar una forma de alfabetización digital sensible a la representación social y cultural. Una de las funciones de la alfabetización digital es ayudar a los jóvenes a cuestionar representaciones y a romper con procesos de otredad para que los miembros de la comunidad puedan expresarse e integrarse en esos contextos. Este artículo analiza cómo estas comunidades, a través de la interacción social, pueden impulsar el entendimiento intercultural y el aprendizaje a través del diálogo y la práctica creativa. El artículo incluye estadísticas para indicar la cantidad de interacción internacional en la comunidad que se analiza (Scratch). Asimismo, también incluye análisis cualitativos a partir de discusiones en el foro, con el fin de analizar los tipos de interacción intercultural que se llevan a cabo.

KEYWORDS

Media, literacy, digital, production, education, cross-cultural, representation, youth.
Medios de comunicación, alfabetización digital, producción, educación, interculturalidad, representación, jóvenes.

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One objective of digital media literacy is to foster intercultural understandings through capitalising on the potential of new media to challenge social, cultural and national boundaries (Castells, 1996; Benkler, 2006; Jenkins, 2006). Media literacy education has a long history of exploring intercultural concepts through its focus on the ways in which media represent people, places and ideas. For example, the academic field of Cultural Studies has influenced media literacy education through its focus on gender, ethnicity, class and national cultures (Williamson, 1990; Hall and Open University, 1997). In digital media contexts, this focus on representational issues becomes more complex and fluid due to new possibilities for individuals to interact with and use media. «Old media» forms such as cinema and television relied on centralisation for production and distribution and this often led to the reproduction of national cultures which are potentially homogenous and mono-cultural (Bruns, 2008). Digital media are distributed, decentralised and individualised (Benkler, 2006) and have the potential to be more internationally collaborative and may foster intercultural knowledge and understanding. This article explores whether or not the Scratch Online Community, an online space for digital media production by children and young people, has been successful in promoting intercultural collaboration and understanding and how it might continue to evolve to achieve this objective to a greater extent.

1. Digital media literacies and intercultural understandings

Digital media literacy education combines established approaches to media literacy education with elements of information and communications technology education (Dezuanni 2010: 23-25). According to Buckingham and Domaille (2009), media literacy education has different objectives in different countries, but is typically underpinned by the goals of helping young people to become critically responsive when using media and to enable democratic participation with media through developing media production skills. The frameworks through which these goals are met also vary, but generally aim to develop the ability to «read» and «write» the media in both instrumental and critical ways. Students learn to critically analyse media texts to identify how they communicate their messages and circulate social and cultural norms through processes of representation. Students also critically analyse contexts such as the institutional influences on production and consumption and the ways in which audiences respond to media. They learn to «write» media by learning media production skills and processes. Media literacy education for children and young people has become an established part of formal schooling in The United Kingdom, Canada, Australia, the Nordic countries and several other parts of the world. It has also become established in after school programs and through specialist projects internationally. In recent years, digital media technologies have expanded the focus of media literacy education to include areas that were previously the domain of information and communications technology education. In particular, aspects of multimedia education like video games production and digital animation, including programming, have begun to occur in media literacy classrooms (Dezuanni, 2009). The presence of social media has also led to an increased focus on ethical and safe practices in online spaces (Boyd, 2008). Digital media literacy education is a contemporary form of media literacy education that engages with the host of new media forms that young people increasingly use in their everyday lives.

Media literacy education has a long history of dealing with intercultural understandings and digital media contexts that provide educators with new opportunities to encourage young people to explore these concepts further. The media literacy education key area of «representation» has been significantly influenced by how the concept was developed and explored in the academic field of Cultural Studies (Hall and Open University, 1997; Williamson, 1990). The main objective of understanding the process of «representation» is to consider how cultural texts selectively construct people, places and ideas according to specific social and cultural norms. In media literacy classrooms, this usually involves analysing media texts to identify instances of stereotyping and distorted, unfair, derogatory or inaccurate portrayals. A concept closely associated with «representation» is that of «othering», theorised by Said in relation to cultural imperialism as a process of emphasising other people's perceived weaknesses in order to bolster the purported strengths of those in positions of authority (Said, 1985).

In digital media contexts, representational processes are complex because social media provide possibilities for individuals to represent themselves and to interact with «others» in ways that are often unavailable in the «offline» world. For example, individuals may meet people they would usually not interact with and this provides the dynamics for potentially new and more democratic forms of social interaction. Of course, social media spaces are not utopias in which social relations are free from the normative processes that

exist offline and theorists have shown that online interactions often reinforce offline social relationships (Boyd, 2008; Livingstone, 2009). Phenomena like cyberbullying and online hate groups suggest that social media spaces provide new possibilities for destructive as well as constructive and positive behaviour. The question, then, is how new media spaces may become spaces for a version of digital media literacy that provides young people with experiences that help them to challenge unfair and derogatory portrayals and that break down processes of «othering».

2. The Scratch Online Community

The Scratch website (figure 1), dubbed the «YouTube of programming» is an online community where young people share their own video games, animated stories, and interactive art (Monroy-Hernandez and Resnick 2008). Members of the Scratch online community, called «Scratchers» use the Scratch programming environment, developed by the Lifelong Kindergarten group at MIT, to program their digital artefacts by putting together blocks of code to control the interactions of visual objects and sounds (Resnick & al., 2009). Two and a half years after its release in 2007, more than 800,000 projects had been shared on the Scratch website. Projects range from physics simulations, to video games featuring Obama and McCain, to animated stories of singing cats. Every month, more than half a million people from around the world visit the Scratch website. There are more than 400,000 registered members, and 25% of them have shared a project. The vast majority of users are between 8 and 17 years old (self-reported), and there is an active minority of adults who often play the role of mentors.

People use the website not only to share their work but also to interact with other creators, exchange ideas, work on collaborative projects, and discuss their daily lives. A number of collaborative efforts have succeeded in creating dozens of projects in what Scratchers often refer to as «companies»; that is, a group of young people who co-create projects. The website is completely open: anyone can browse, download, and interact with people's projects, or register for an account to post their own. Participants are encouraged to download other people's projects to learn how they were created and reuse parts to create remixes; in fact, 28% of the projects are remixes. All projects are shared under a Creative Commons license. Registered members can tag, «love» and bookmark projects. Furthermore, in the spirit of popular online social networks such as Facebook, they can befriend other creators while maintaining the main goal of creating projects. The Scratch project has helped in fostering new media literacy by providing children and young people with the tools and the social environment to become full participants in the creation of digital culture.

This article explores the ways in which the Scratch Online community provides opportunities for users to experience difference, and therefore to develop intercultural understandings. Scratch and the Scratch Online Community are quintessential examples of a tool and space for developing digital media literacies that differ significantly from the opportunities provided by more traditional forms of media literacy education. Until relatively recently, media produced by young people in media literacy classrooms could only be shared and discussed with classmates, families and occasionally a slightly broader audience. Global media distribution was the domain of international corporations and international discussion amongst young people occurred via pen friend schemes and international exchange opportunities. Creativity-oriented online social networks like Scratch have completely changed this dynamic so that international sharing of youth produced media products and associated intercultural dialogue are becoming commonplace. This paper asks how Scratch can be used to enhance intercultural understanding and how the online space might be

Figure 1: Home page of the Scratch website, June 2011.

improved to encourage further productive and constructive intercultural dialogue and sharing of media productions.

3. Research questions and methods

This article initially aims to explore the types of intercultural exchange that currently occur within the Scratch Online environment. It asks where users are located, how often they share their work and how often people from other countries visit this work. These questions will be answered through reference to statistics generated directly from the database that holds information about registered Scratch Community members, the number of projects they create and visits to these projects. These statistics, however, are not able to answer other questions we have about the types of things Scratchers say to each other about their projects and the dialogue they might have about cultural topics and issues.

We would also like to know how the site proactively provides opportunities for intercultural exchange. In particular we want to answer the following questions: Does the Scratch Online Community actively encourage international participation and intercultural exchange? When sharing and discussing their work, do Scratch community members discuss issues related to ethnicity or culture? Does the Scratch community have strategies in place for ensuring that discussions about ethnicity and culture remain positive and productive?

Different qualitative methods are used in this paper to answer these questions. To explore conversations between community members about issues related to ethnicity and culture, and community strategies for ensuring positive conversations, a search of the site's online forum was conducted to locate examples of dialogue related to those topics. This approach has obvious limitations because it does not indicate the frequency of such conversations. However, in this article we aim to identify the types of conversations and responses that potentially occur in the community, rather than how often they occur.

To identify how the Scratch community currently encourages international participation and intercultural exchange and how it might implement further strategies to achieve this, Monroy-Hernandez draws on his experience as a participant observer in the Scratch Online Community. Monroy-Hernandez has been involved with the Scratch Online Community from its inception and was responsible for the conceptua-

lisation and development of the community. In this sense, aspects of the analysis are self-reflexive.

4. International participation in the Scratch Online Community

As of the 13th May, 2011 users of the Scratch Online community came from approximately 135 countries. These are on a continuum from highly technologized countries like the United States, The United Kingdom and Australia to countries like Zambia where there is little access to technology. An initiative of the Scratch development project was to make Scratch available on the One Laptop per Child (OLPC) low cost computer system, meaning that children and young people in some of the world's least technologized countries have access to the program. There is a great degree of variability in the number of users from each of these countries and the number of projects they produce. Table 1 provides a sense of the international scope of Scratch and its Online Community.

The number of individuals viewing and uploading content to Scratch from countries around the world suggests that it is a genuinely international phenomenon. It is a computer clubhouse on a global scale and its international take up shows that it has potential to be a cross cultural tool for the creative use of technology. Some of the site's affordances have led to its level of success internationally. For example, for users originating in Mexico and Israel, some of the sections of the home page are customized to make the experience more localised and available in Spanish and Hebrew. The US developers of Scratch have formed partnerships with collaborators in those countries to support

Country	Users	Projects
Australia	27,233	14,366
Bangladesh	1,060	105
China	7,572	4,120
Brazil	28,542	9,390
Egypt	1,229	118
Indonesia	2,421	222
Japan	4,409	2,771
Mexico	11,498	9,945
Pakistan	1,139	128
Peru	2,580	1,658
Russian Federation	3,337	1,550
Spain	6,747	6,749
Tajikistan	38	7
United States	308,781	489,947
Vietnam	2,066	568
Zambia	140	1

Table 1: A snapshot of some of the 135 countries from which Scratch users originate.

the development of the community there. Another sign of the international nature of Scratch is the «tag cloud» on the front of the Scratch Online Community website (figure 2), which shows the most popular words being used to tag projects in Scratch. These tags are frequently in languages other than English.

Another way to measure the level of international interaction on the site is to identify the number of international «visits» undertaken when individuals from one country visit projects uploaded by individuals from a different country.

Figure 2: Scratch Online Community Tag Cloud showing international participation.

Since the inception of the Flash Online Community, this has occurred 15,839,491 times. Table 2 shows how often this has occurred as of 13th May, 2011. The most common combination is for individuals to visit projects produced in their own country. However, there is a significant amount of international visitation. These figures are self-reported.

5. Dialogue about ethnicity and culture in the Scratch Online Community

Social interaction is a significant feature of the Scratch Online Community and in many ways the site functions as a social network. Users are able to leave comments about other users' work by making comments under the project's display area. Producers can add «Project Notes» to give a description about what they are trying to achieve and often use this space to respond to the comments made by other users. Users can also take part in discussions in dedicated forum spaces. To give an indication of the level of engagement on these forums, as of June 3rd, 2011 there were 2288 topics and 18538 posts in the «New Scratch Members» forum and in «Advanced Topics» there were 2923 topics with

46386 posts. Forums are also available in 12 languages other than English: German, Spanish, French, Italian, Chinese, Greek, Portuguese, Norwegian, Dutch, Turkish and Polish. There are also 117 topics and 1191 posts in a forum for «other languages». These forums are central to the social nature of the Scratch Online Community and a multitude of topics are discussed in this space.

The international nature of Scratch and the combination of opportunities for creativity and social interaction provide a unique space in which intercultural exchange can occur through the development of digital media literacy that is responsive to social and ethical issues. The forums and other features of the Scratch Online Community enable the combination of multimedia creativity and social interaction. The technical and creative aspects of digital media literacy are developed as Scratchers work on their projects and seek assistance from other members of the community as well as their «offline» teachers and mentors. In this context, scratchers are just as likely to learn from someone in another country as they are from a person sitting next to them. Scratchers also learn to respond to other users' feedback about the content of their productions

Country of origin	Destination	Times	Country of origin	Destination	Times
United States	US	9,122,454	United States	DE	44,421
United States	GB	657,275	Germany	US	49,200
United Kingdom	GB	61,8521	Netherlands	US	48,498
United Kingdom	US	560,654	Canada	GB	41,649
Canada	US	330,781	Ireland	US	38,096
United States	CA	305,770	United Kingdom	AU	36,969
Canada	CA	229,313	Taiwan	TW	36,246
United States	AU	197,200	United Kingdom	CA	35,987
Australia	US	160,470	Korea, Republic of	US	35,802
Antarctica*	US	157,254	Italy	US	32,650
Thailand	TH	129,104	Hong Kong	HK	32,600
Christmas Island	US	128,136	France	US	32,222
Australia	AU	118,323	Mexico	MX	28,876
Japan	US	112,436	Brazil	US	27,172
United States	NZ	94,897	United States	IE	27,116
New Zealand	US	79,533	United States	BR	27,020
New Zealand	NZ	58,048	Australia	GB	25,604
Korea, Republic of	KR	53,156	Brazil	BR	25,541
Germany	DE	51,139			

Table 2: The number of «visits» to Scratch projects by international origin and destination.
* The numbers for Antarctica are inflated as users select their country from a drop down menu and Antarctica is the first country listed.

and this relates to both their creativity and the sociocultural implications of their productions. Where projects or comments are potentially offensive, hurtful, unfair or work to «other» members of the community, the community is potentially a space for teaching and learning through intercultural exchange. The claim being made here is not that the Scratch community will always positively respond to negative processes of representation. Rather, the claim is that the community provides an opportunity to respond to harmful representations, just as any media literacy classroom can. The following forum exchange provides and example of how the Scratch Online Community potentially acts to develop socially responsive digital media literacy. Note that the user names have been altered and some of the text has been changed to protect the identities of the Scratchers involved:

— «Hello everybody. I'm here to discuss the foreign Scratchers from countries like Japan, Indonesia, and other non-English speaking countries. Now, I'm not trying to be racist but it seems that some scratchers don't understand some things. It seems that they haven't gotten the idea like that you can draw things, and (no offence) everything doesn't have to bounce around. I wish there was a way to convert what they say also. I'm not trying to be offensive at all, I just wanted to see if there is a way to change it for them. I think also we should try to recognize them, and help them. Thanks!» (MickeyMantle1234: Scratcher. Posts: 4).

— «Hi MickeyMantle1234. Scratch is a diverse community where people of all different backgrounds can come to collaborate and share projects and ideas. Many Scratchers aren't from English-speaking countries – in fact, there are whole galleries of projects dedicated to specific languages and cultures. To you, these Scratchers are foreign, but Scratch is a global community, not an American one. I know you might not have meant any harm, but I think many «foreign» users might be offended by the idea that they just don't get Scratch the same way we do. […] Just make sure you remain respectful of everyone; you might have something to teach them, but you can also learn something from them as well» (Halfmoon: Community Moderator. Posts: 1802).

— «Also, please understand that Scratch is used in a lot of schools in other countries - often in beginning programming classes where everybody is following along with the teacher. So you might see 30 projects suddenly show up on Scratch all doing basically the same simple action, such as a bouncing ball or a talking Scratch cat. This can leave you with the impression that people from other countries only do very basic projects. But that's not necessarily the case... it's just that they often have large classrooms of kids all doing simple projects at school. Treat others as you would like to be treated» (Paddlesteamer: Scratch Team. Posts: 6327).

— «Yeah totally. I absolutely was not trying to offend them at all. I was just trying to help» (MickeyMantle1234: Scratcher. Posts: 4).

In this exchange, a new Scratcher (4 forum posts – MickeyMantle1234) positions non-English speaking members of the community as «other» by representing them as «foreigners» and by suggesting they are less able to use Scratch. S/he seems frustrated that it is not possible to understand what the non-English speaking Scratchers are saying and that their skill levels seem low. MickeyMantle1234's frustration seems to come from how difficult it is to help the «foreign» Scratchers when they do not share a common language. However, the assumptions underlying the comments are problematic, as pointed out by a community moderator and Scratch team member. MickeyMantle1234 has placed him/herself at the centre of the Scratch Online Community, assuming that English should be the dominant language of the site. While this individual wants to help, it is through the process of making it more possible for «them» to interact with «us». This works very much in the manner of Edward Said's processes of «othering», with an attempt to position non-English speakers as inferior, less intelligent and in need of help (1985).

Experienced members of the Scratch community, the moderator (1802 posts) and Scratch team member (6327 posts) identify this as a «teachable moment» related to intercultural understanding. Their responses aim to reinforce a community norm for the Scratch Online Community that does not tolerate «othering» and in which people from all ethnicities and nationalities feel welcome and supported. There are some interesting contrasts with the ways in which teaching and learning about representation and «othering» have occurred in this instance when compared to more traditional media literacy approaches. It has long been the practice in media literacy education for teaching and learning about concepts like representation to occur as part of «theory» lessons. When the concepts have been learnt, it is assumed that students will then be able to apply these to their own productions (Buckingham, 1995). This approach is exemplified in approaches to media education like the «demystification» during the 1990s which placed emphasis on revealing hidden messages in media and which were

suspicious of classroom production on the basis that it was likely to teach students to simply reinforce dominant ideologies (Masterman, 1990). Buckingham and others have challenged the separation of theory and practice, suggesting the two need to work together to provide students with personally meaningful learning experiences (Buckingham, 2003; Burn, 2009). The example provided here illustrates that the social context of digital media environments makes it essential that «theory» and «practice» not be separated. The response of the Scratch «elders» to MickeyMantle-1234's comments, and MickeyMantle1234's apparent willingness to accept the community's norms (via his final comment) show that social interaction in online spaces has great educational potential to achieve many of the goals of media literacy education related to social and cultural beliefs and values.

This is further reinforced by another example that shows that it is not just the Scratch «gatekeepers» or «elders» who establish these social and cultural expectations in the Scratch Online Community. In the following exchange community members act to establish norms that promote diversity. A Swedish Scratcher outlines some information about her/his country and then invites other Scratchers to share information about their countries, as a form of intercultural exchange of knowledge and information. When a Scratcher aims to undermine this by making provocative (albeit ostensibly humorous) comments about American superiority, the other Scratchers quickly re-establish a norm of diversity and tolerance:

— It would be fun, and you can learn about other countries. Sweden (Sverige in Swedish). Capital: Stockholm. Inhabitants: About nine million. Climate: Pretty cold, and much snow in the north, quite mild in the south. School is mandatory from the age of seven, you go to «ground school» until the age of sixteen when you go to «Gymnasium» (Not mandatory), then you go to university. You don't have to pay to go to any school, including gymnasium and university. Form of government: Constitutional monarchy. Typical Swedish thing: Swedish meatballs and unpacked candy in stores. Famous Swedes: ABBA (band), Björn Borg (tennis player), Ingmar Bergman (Film maker), Astrid Lindgren (Children's book author most known for Pippi Longstocking), Ingvard Kamprard (Started IKEA) and the Swedish chef in the muppets show. Now tell me about your country (Waycool: Scratcher. Posts: 1835).

— Well i'm Vietnamise but born in the USA so I'm a citizen. The capital is Saigon. The Signature dish of Vietnamsie culture is Pho (pronouced Phuh) Pho is

vietnamise noodle soup. Government-Communist... but doesn't mean in Communist!... If you want to find more then search on Wikipedia Happy New Year! (ScratchY: Scratcher. Posts: 2773).

— America We is the rulers of the world!!!! Not really. We have around 300 million people. We have great films, tv shows, not presidents...School is good. Grades One-Five in elementary school, Six-Eight or Nine in Middle and grades Nine or Ten through Twelve in High school. We then go to college/university. California rocks with its govenator. Too bad I don't live there now. (TheAngel: Scratcher. Posts: 2960).

Of course we rule the world (Blockhead: Scratcher. Posts: 131).

— Please don't say things that are offensive to others espesicialy to people from different countries. Thank-you (ScratchY: Scratcher. Posts: 2773).

— Good point! - I don't care if they say that, but some might find it offensive (Waycool: Scratcher. Posts: 1835).

— «I find it just plain arrogant. I have a billion comments about that statement but I'm going to keep them in» (XYZ1234: Scratcher. Posts: 3957).

— «I just find it sad. Its depressing that the stereotype for America is arrogant, fat and cruel. That plays into it. Although I did start that. I hope everyone took it as a joke...*Goes to put smileys next to sentences* (TheAngel: Scratcher. Posts: 2960).

These posts are outtakes from a much longer series in which other Scratchers discuss their countries, home cities, towns and provinces or States and topics like local food and customs. The overall sequence is an exemplary illustration of the ways in which the Scratch Online Community is a space where intercultural understandings are developed. It also illustrates the ways in which the norms established within the community may be upheld by community members without the intervention of community moderators. In this exchange, the reference to Americans being «Rulers of the World» aims to establish a norm that reflects those established within popular culture, particularly through Hollywood. This is a norm of American superiority and dominance and one that positions international cultures as inferior. The Angel's reference to Hollywood and the Governator (former California Governor, Arnold Schwarzenegger) provides an opportunity for Blockhead –this is a pseudonym, but very close to the name chosen by this Scratcher– to repeat the norm of American dominance in an unambiguous fashion. This works to dismiss the discussion around cultural diversity and local

identities or to reduce it to a topic for humour. However, the Scratchers who began the discussion are unwilling to allow their dialogue to be undermined and re-establish the norm of tolerance. XYZ1234's response illustrates how passionate some members of the community are about defending diversity of opinion. It is interesting that while The Angel shows willingness to remain part of the discussion, Blockhead falls silent in the thread. This exchange is another example of how education about intercultural understanding has been supported in the Scratch online community.

The claim here is not that exchanges like this are inevitable, frequent or always be positive. Rather, the claim is that the Scratch Online Community provides the opportunity for these types of exchanges to occur and that the norms of tolerance and diversity established within the community by its moderators makes it more likely that these values will be accepted and defended by community members. Further analysis, however, would need to occur for this claim to be substantiated.

6. Conclusion

The Scratch Online community is a space for digital media literacy that provides opportunities for teaching and learning that go beyond the usual capacity of traditional media literacy. The Scratch community is a space that increases the potential for intercultural participation while it expands users' new media production skills and creativity. At the same time, users have the opportunity to interact across cultural and geographic boundaries in socially acceptable ways that celebrate diversity. This is not to say that traditional media literacy does not still have a great deal to offer digital media literacy education. Instead, this article argues that the version of digital media literacy made possible by Scratch goes beyond learning how to access, use and create media. It is also possible to draw on the important objective from traditional media literacy that aims to help children and young people respond to social and cultural issues like intercultural understanding in a critical way.

The examples provided in this article point to participation in Scratch and similar communities as a safe space for intercultural exchange. The challenge for media literacy educators and the Scratch production team is to consider how opportunities for social and cultural learning can best be harnessed to meet the objectives of this extended definition of digital media literacy.

Acknowledgement

References

BENKLER, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven [Conn.]: Yale University Press.
BOYD, D. (2008). Why Youth Heart Social Network Sites: The Role of Networked Publics in Teenage Social Life. In BUCKINGHAM, D. (Ed.). *Youth, Identity, and Digital Media*. Cambridge: MIT Press.
BRUNS, A. (2008). *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage*. New York: Peter Lang.
BUCKINGHAM, D. (1995). *Making Media: Practical Production in Media Education*. London: The English and Media Centre.
BUCKINGHAM, D. (2003). *Media Education: Literacy, Learning and Contemporary Culture*. Cambridge: Polity Press.
BUCKINGHAM, D. & DOMAILLE, K. (2009). Making Media Education Happen: A Global View. In CHEUNG, C.K. (Ed.). *Media Education in Asia*. New York: Springer.
BURN, A. (2009). *Making New Media: Creative Production and Digital Literacies*. New York: Peter Lang.
CASTELLS, M. (1996). *The Rise of the Network Society*. Cambridge, MA: Blackwell Publishers.
DEZUANNI, M. (2009). Remixing Media Literacy Education: Students «Writing' with New Media Technologies. *The Journal of Media Literacy, 56*.
DEZUANNI, M. (2010). Digital Media Literacy: Connecting Young People's Identities, Creative Production and Learning about Video Games. In ALVERMANN, D.E. (Ed.). *Adolescents' Online Literacies: Connecting Classrooms, Media, and Paradigms*. New York: Peter Lang.
HALL, S. & OPEN UNIVERSITY (1997). *Representation: Cultural Representations and Signifying Practices*. London: Sage in Association with the Open University.
JENKINS, H. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. Chicago: The MacArthur Foundation.
LIVINGSTONE, S. (2009). *Children and the Internet: Great Expectations, Challenging Realities*. Cambridge: Polity.
MASTERMAN, L. (1990). *Teaching the Media*. London/New York: Routledge.
MONROY-HERNANDEZ, A. & RESNICK, M. (2008). Empowering Kids to Create and Share Programmable Media. *Interactions, 15;* 50-53.
RESNICK, M.; MOLONEY, A. & MONROY-HERNANDEZ & EASTMOND, E. (2009). Scratch: Programming for all. *Commun, 52;* 60-67.
SAID, E.W. (1985). *Orientalism*. Harmondsworth: Penguin.
WILLIAMSON, J. (1990). *Consuming Passions: the Dynamics of Popular Culture*. London: Marion Boyars.

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Educational Challenges in Times of Mass Self-Communication: A Dialogue among Audiences

Desafíos educativos en tiempos de auto-comunicación masiva: la interlocución de las audiencias

ABSTRACT

This text is an approach on two leading topics: the changes emerging in the way audiences deal with new and old media, and, the multiple processes of reception and interaction occurring as a result of the information and communication systems. Audiences are seemingly devising new roles as creators and emitters of media products which they exchange through a variety of languages, formats and technologies. Significant differences are emerging between widespread consumption and connectivity, and the authentic, horizontal and creative participation of audiences. This paper also develops a proposal that is educational, communicative and pedagogical for this changing and polymorphous audience repositioning. This proposal is based on the tradition of the Latin American Critical Pedagogy of Communication course offered by the Communication Studies department of the University of Valladolid (Segovia). The study of Communication, Education and Society in a Digital Context is part of the degree course in Communication at the UVa, which was established with the aim of developing and reinforcing the skills required to achieve a global dialogue in the field of communication and education. The main goal of communicative competence is to instruct on the techniques and skills needed to produce and explore the application of media contents.

ABSTRACT (Spanish)

En este texto se abordan esencialmente dos temas. En primer lugar, los cambios emergentes en el estar como audiencias frente a nuevos y viejos medios y, en segundo lugar, los procesos múltiples de recepción e interlocución que hoy experimentan. Se argumenta que las audiencias sin perder siempre ese rol, están también asumiendo otros más activos e interactuando cada vez más como noveles productores y emisores de contenidos mediáticos, similares a los que intercambian a través de diversos lenguajes, formatos y dispositivos tecnológicos. Se destaca la necesidad de diferenciar el consumo amplificado y la gran conectividad existente, de una auténtica interlocución horizontal, creativa y propositiva de los interlocutores. Por otra parte, se presenta una propuesta educomunicativa acorde con esta realidad polimorfa y cambiante de las audiencias, que rescata la tradición pedagógico-crítica iberoamericana y que se desarrolla en la Universidad de Valladolid (Campus Segovia). La asignatura «Comunicación, educación y sociedad en el contexto digital» se programa en los estudios de Comunicación de esta Universidad con el objetivo de desarrollar y fortalecer aquellas capacidades, destrezas y reflexiones apropiadas para una interlocución más integral en el mundo de la educomunicación. El principal objetivo de la educación en competencia comunicativa es educar en las técnicas y estrategias para el análisis y producción de contenidos en medios.

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1. Introduction

What is changing and what stays the same in audience and screen interaction? Are audiences a dying breed in the society of networks? Is the age of being mere passive receivers of media over, and with it the media's traditional modes of educomuncating with their audiences? As social subjects on the move from one communicative form to another, are we now different from when we interacted with screens? What are the conditions that mark this new culture of dialogue? Now that we represent many different types of audience, does that change us as citizens and allow us to be more assertive and creative; are we empowered? How can educommunication respond to these challenges and be culturally, socially and politically relevant today?

We tackle these questions in order to respond to and reject certain implausible suppositions that these issues present, both in terms of the mass migration to the digital world and the use of social networks and the predicted «death» of television and other hegemonic mass media (Carlon & Escolari, 2009), as well as the culture of passivity or «spectatorship» that lives on in certain sectors of the audience and in many of their interactions with the Internet (White, 2006). We also contest other assumptions about the disappearance of this audience which seems to have cast off its status as receivers or spectators to become users, senders and receivers, «prosumers», or even fans within the new culture of interactivity and convergence (Jenkins, 2008).

We adopt Castells' (2009: 105) expression «mass self-communication» as we believe it conveys the phenomenon we are experiencing in Latin America, of classic mass communication and its concomitant audience reception that is more or less passive operating alongside a gradual but still incomplete migration of sectors of this audience to the digital world and a more proactive and creative dialogue.

It is precisely horizontal dialogue and its modes (types, levels, styles) within interactivity which establish the conditions «sine qua non» that define new roles and identities for audiences within the contemporary communicational ecosystem (Jenkins, 2009). And it is these challenges that we aim to meet with educommunication strategies. However, for Ferrés there is an important nuance: «If up to now receivers have been referred to as the public or the audience, those who use the new screens are now called interlocutors. The arrival and acceptance of the term «prosumer» is probably the ultimate expression of this paradigm shift. Today's consumer does not deny himself the opportunity to be a producer. He has all he needs to do so at hand» (Ferrés, 2010: 251-252).

2. Disillusionment with broadened connectivity

Following the widespread optimism at the possibilities offered by connection to the digital world and the potential for audiences to become producers, the euphoria over the advantages of the new technologies and social networks has been tempered by a check on reality, which lags behind desires and good intentions.

Firstly, the instrumental access of the social sectors to the technology is less than desirable. In Mexico for example (more or less as in the rest of Latin America), no more than 40% of the population, that is 45 million out of 110 million, has Internet access compared to 64.2% in Spain, according to recent surveys[1].

Secondly, access to the digital culture that the technology seems to offer is still at a low level, although it is difficult to measure because it transcends basic access to digital devices and their occasional usage. Various studies across different countries have demonstrated that only small segments of those who are connected can really be identified as active and engaged communicators (Orozco, 2011).

The reasons behind this are many. History shows that although technology has an impact on society, the cultural change that this brings takes longer to materialize. Another factor to consider is that we are emerging from an age of authoritarianism and verticality in mass media mainly conveyed by television, which positioned audiences as passive and too timid to express opinions which had no resonance because there were no channels to argue against the mass messages, or opportunities for any real or symbolic interaction.

Latin America also has another communication-related problem in the decades-long educational imbalance in which schools have given greater priority to reading than writing, favoring reception over expression. If we consider Postman, «in a culture dominated by the printed word, the main feature of public discourse has been the orderly and coherent presentation of ideas, and the public is trained to understand this type of discourse» (Postman, 1991: 56), we see that this is not the case. In Latin America, there is an expressive deficit that seems to hold us back from being subjects who are fully capable of communicating, transmitting and producing within the new platforms of dialogue (Orozco, 2010).

And it is not as if being different types of audience (and being audiences many simultaneously), using new digital skills and expertise and possessing various communication devices is something that comes auto-

matically or necessarily out of the effervescence of interactivity and convergence between screens. Neither is it something that is simply attained and which stays with us for always. Dimensions of interactivity are different from those of the complex and essentially cultural exchange which occurs beyond the mere mastery of digital devices, and assumes a degree of learning and entertainment, and explicit agencies and willpower on the part of the subjects who interact (Jensen, 2011).

Being an audience member means being able to use different modes of interaction, from the latent to the explicit, which do not necessarily qualify the audiences that use them as senders and producers. Much research into Latin America audiences (Jacks, 2011) concludes that one of the greatest challenges for the reception of old and new screens is to clarify where consumption ends and production begins for all communicators.

Not only in Latin America but worldwide, there is an illusion that participation, dialogue and creative production in audiences-communicators represent a broad, decentralized, deferred consumption controlled by the audiences themselves which, in the end, is still consumption. Controlling consumption or personalizing it does not make it a productive, innovatory and transcendent action, nor is it a mutation from consumer-receiver to sender-producer. We should not forget that «consumption can also make us think» (García Canclini, 1994).

The challenge of consumption is that it is more than just food for thought. It helps foment creativity and production, and situates the audience within a dimension of interlocution in which they exercise greater leadership capacity. The creative act itself provokes other communications in an ascending spiral of creativity and empowerment for all participants.

What has changed and will continue to change in the reception processes is the positioning of the audiences. As various studies have shown (Orozco, 2011) reception can be deferred, collective or personalized. A communication can be seen outside the screen for which it was originally produced and then transmitted on yet another. This is the case with TV programs that can be seen on the Internet, on a cell phone screen or on an iPod. This was the case with the cinema in which films, and now videos, can still be viewed on television, on the Internet or on any other screen. Essentially there is nothing new in this except a growing and often compulsive transmediality in the reception of audiovisual products.

The reception of television has come out of its historical closet: the space in the home where we watch TV can now take place anywhere (Repoll, 2010). Reception happens in places outside the home, in

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bars, markets, shopping centres, restaurants, on public transport, in shop windows, to name but a few of the scenarios where there is interaction with screens, as many studies have pointed out.

This transmediality of diffusion and reception, the increasing range of places where audiences are found and their hyperconnectivity all give the impression that media consumption automatically translates into something productive now that it is under the control of the consumer, the Net user, the videogame player, the film or TV watcher, etc., without realizing that the majority of consumer exchanges are reactive and unaccompanied by any type of premeditated reflection. The fact that they are deferred and transmedia in nature does not mean they contain a germ of creativity or a horizontal relationship.

The sensory spaces for reception are also undergoing important changes. Watching TV now not only takes place away from its traditional location and scre-

en but also watching a film now longer means physically going to a cinema to sit and watch a movie. Young people have different reasons for going to the cinema, converting the experience into a sociocultural activity to be shared with those with whom they are developing important common reference points in their socio-affective relationships.

Likewise, the cell phone has completely revolutionized the traditional usage and reason for the telephone, now transcending verbal communication over distances to become a versatile device that is receives and transmits the voice, sounds and images personalized by

more complex but we also see the challenge ahead for educommunication: to foment understanding of the multiple languages and channels, and the transmediality of the dialogues; to form subjects who engage and participate in communicative exchanges.

It is becoming increasingly clear from international studies that straddle various countries, such as the Pew Internet and American Life (2005) report, a study by Fundación Telefónica and Ariel (2008) and the Manifesto for Media Education (2011), that the concern is not about participation but about user reaction or passive connectivity, for it seems that only a small percentage of those who connect really participate.

When the complex relationship between channels and languages are taken into account the channels, changes in audience participation can be measured by their degree of interaction and dialogue. Participation of this type transcends technical competency with digital devices and instead responds to the meanings and pathways opened up by interacting with information on the screen.

> The education of active audiences means that teaching-learning models need to be created and inserted into university curricula. These models should give students free rein to express themselves and they must reflect constantly on the new logic of interlocution. Neither the interactivity nor the technological possibilities offered to contemporary audiences are sufficient to develop a knowledge society; only an integrated form of education that makes best use of the immense potential of the new value chain that the current digital context provides can transform the new audiences into engaged producers and critical users of a communication that is truly global, participatory and integrated.

If we believe that the whole is not the sum of its parts, then it follows that the usage of new screens does not reflect the mere sum of possibilities (react, download material, send material to others, simultaneously handle activities such as listening to music, chatting and playing videogames) and not just part of a sum, we

the user throughout the day (Winocur, 2009). Screens and digital devices are now much more than mere instruments. They are complex machines that connect and locate, acting as a safe haven in a sea of uncertainty, and entertaining the user when bored, etc.

The diversification and the growing, simultaneous use of various languages and formats in intercultural communication enable the user to construct and send discourses in many different languages, similar to those transmitted by different channels or devices. This assumes that the audience's communicative processes are increasingly participatory, creative, innovatory and

can then start to believe, in the strictest sense, in the emergence of a different form of dialogue. Other types of interaction that are broad and diverse must be understood as a preamble or prerequisite for a different kind of dialogue. Supporting this transition is one of the most pressing issues for media education and educators.

As Jensen (2005) contends, interactivity is the dimension in which the audience's sense of identity is modified because the audience who engages in interactive production is also, at the same time, the user. Being a user marks a qualitative difference in regard to the concept of audience. A user-producer means the

audience becomes a critically autonomous agent. And agency, as Giddens (1996) stated, involves reflection not just action or reaction. It is precisely this dimension of cognitive, conscious production and decision that distinguishes interactivity from mere reaction to stimulus or to any behavioural of sensory change.

Various studies of cases of young people teaching themselves to read and write outside the school show how the critical point in their learning is reached when the subject reflects on and distances himself from these practices to assess their worth and then reinserts them in other contexts and scenarios.

Be this as it may, it does not rule out the possibility that in other moments or different digital practices or contexts, the audience will not behave as users-producers. That is, they will not make a coordinated media-based reflection or action via the real, material and significant transformation of the audiovisual reference.

In this age of revolutions fanned by the communication and mobilization made possible by social networks, it is more vital than ever to recover the «intelligent multitudes» concept coined by Rheingold. «Intelligent multitudes are groups of people who undertake collective mobilizations, be they political, social, financial, thanks to a new medium of communication that enables new forms of organization to be set up, different in scale, involving people who until then were unable to coordinate such movements» (Rheingold, 2002: 13).

The author's concept is particularly relevant today with the Indignant Ones, a protest movement led by young Spanish people that mobilized in the spring of 2011 (Movimiento del 15 M, Democracia Real, ya) and with the uprisings in countries in North Africa. This new form of interactivity was crucial in the latter case, in which a large number of citizens became both users and producers of communication by applying the new technologies of the social networks. What emerged was a form of organization based on the network concept, active participation and not just being an audience or taking part in varied consumption.

For this reason the education of today's users and producers, and especially of those university students studying Communication, must be toughened in two ways: as recipient and critical user of messages and as producer of information and communication. Media literacy needs to confront this seemingly contradictory perspective of citizens and the media, in which there is an audience which is more or less passive or there are critical users and producers, based on the experience and reflections of the producers-receivers themselves. This is the objective of «Communication, edu-

cation and society in the digital context», a pioneering university degree course on offer in Spain, which takes media literacy content as the basis for the students' learning process.

3. Communication, education and society in the digital context

In Spain, as in the majority of countries in Latin American, media education has never been a staple of the school curriculum. The LOGSE (General Organic Law of Education) created two optional subjects: Processes of Communication and Audiovisual Communication which both appeared then disappeared from the curriculum. Currently, the contents of any Education in Communication course can be found spread across various different curricular subjects.

As we have posited in other works, we must ask ourselves: «Which educational model do we want to promote in the 21st century? This question must incorporate the best of recent pedagogical trends that centre educational action on the process of the student's work and which are able to adapt to a world of changing realities» (García Matilla, 2010: 164-165).

«Communication, education and society in the digital context» is a basic part of the degree course in Publicity and Public Relations at the University of Valladolid's campus in the city of Segovia, which aims to prepare students to face the new challenges of communication in the 21st century. From the start, students learn how to become users-producers, creative producers and critical receivers of messages. They get to create their own self-portrait, which gives them the chance to talk about themselves to others and to exchange opinions with their fellow students through interviews. This task is completed at the end of the first year by a piece of creative work and the production of a micro-investigation in which students apply skills and expertise to frame questions, draw up hypotheses and choose suitable methodologies for research into specific communication-based themes. The process ranges from the most personal to the most instrumental, completing a cycle of critical reception and creative production. This process has included reflection and practice of artistic creativity as a basic instrument for media literacy in the digital context. Digital literacy in this case refers to an integral multimedia and audiovisual communication. It puts the students in touch with a new hypermedia world in which new and old media coalesce, and situates them where the changes and transformations are taking place that reflect the end of the analogical age and the beginning of the digital age.

The main objective of this subject is to provide basic theoretical-practical knowledge and a global framework for understanding the communicative processes in their many facets, and how they function in our society within the digitally globalized multimedia context. Coming at the start of the degree course, it also aims to give students a series of basic conceptual tools for understanding and assimilating contemporary communication processes, which the students study in greater depth later in the course. It also aims to provide students with the basic instruments for communicating through the written and spoken word («audio-scripto-visual» in the words of Jean Cloutier) and to instruct

the understanding of and reflection on the communicative and information processes; students should be able to identify the main elements, actors and structures of the communicative processes, and know how to integrate the knowledge acquired in an interdisciplinary perspective.

2) Creative communication as an educational instrument of analysis. We designed the second part of the course around the idea that one of the deficiencies in educommunication has been its failure to integrate the teaching of the traditional arts or to underplay their importance as instruments for communication. In the same way, the teaching of art and culture at the basic educational level has failed to include the audiovisual arts and the new communication media as part of the understanding of our cultural heritage. This could be due to a deliberate separation or mutual incomprehension (which often occurs in practice) between communication and culture, between «new and old media» and «new and old media disciplines» (Navarro, 2008).

> This situation has given rise to a new value chain and the creation of new genres of digital communication: social networks, blogs, wikis, platforms such as YouTube, etc., but it has also affected the old forms of communication and expression. We believe it is vital to study and analyze these transformations, their nature and the repercussions on the way we communicate with each other, and that the students on this course reflect on this context based on their own experience as users-producers.

Today, with the application of audiovisual and digital communication technologies to art and communication and the creation of new genres, we can no longer talk of a clear-cut division between cultural media and communication media. Yet we need to understand the new forms of production and reception of media (communicative and cultural) in an intertextual and contextual way. The subject with the title «Communication, Education and Society» in the digital context aims to close this gap with experiences and proposals for research and action based on the creativity of the students themselves, starting from a review of key concepts such as culture, the media and the information and communication systems.

them how to analyze messages across different media and supports in the current digital environment.

The subject content is based on three pillars each with a different theme:

1) Introduction to media education: educommunication in the digital society. This first part of the course consists of an introduction to the concept of education in communication and to other fundamentals of the educommunication field (user-producer, interaction and interactivity) as well as to the work and research carried out by leading educommunicators. Basic notions of visual deconstruction and discourse analysis are discussed, and group work is promoted as an important factor in this early stage for boosting creativity and producing creative output and the development of critical thought; these are the basic working tools of the course. The objectives of this section are for the students to acquire a conceptual language for

The students work on applying creativity to the analysis of the media, culture and their relation to the social context. To do this, the students must produce their own piece of creative work (individually or as part of a group), which consists of the creative reading of an urban space in Segovia. This activity is part of an artistic and educational research project called «the city's footprint: an interdisciplinary project» in which

professors and artists work in collaboration with the city's «Esteban Vicente» museum of contemporary art. In this practice, an analysis is made of the actual processes that emerge from an idea in a script to final production, concluding with a reflection on how to make the best social, educational and cultural use of the media of creation and communication. The objectives are: to promote creativity as an instrument of personal and collective development, and to understand the importance of creativity for making the best social, educational and cultural use of information and communication systems.

3) Old and new media in the digital context. Genres, convergencies and discourses. The emergence of new technologies has brought about changes in communication, information and culture that not only affect production but also reception. In this context, one of the most important phenomena has been the transformation of receiver into producer of messages and content: the user-producer. This situation has given rise to a new value chain and the creation of new genres of digital communication: social networks, blogs, wikis, platforms such as YouTube, etc., but it has also affected the old forms of communication and expression. We believe it is vital to study and analyze these transformations, their nature and the repercussions on the way we communicate with each other, and that the students on this course reflect on this context based on their own experience as users-producers.

As a culminating experience, the students work under the supervision of a tutor to conduct deeper investigation into specific research topics from the course: educommunication and participative culture; the concept of public service in the digital industry's new value chain; new participatory media in the network; new forms of providing information in the digital context; leisure in the digital culture: 3D animation and videogames. Their approach to these themes comes from the proactive audience perspective. The aims are to work with the fundamentals of educommunication that go beyond Web 2.0; to know and analyze the new communication and information platforms and to reflect on their reach and importance; to be able to identify the new value chain and the new genres of culture and information that come with the ICT; to know the potential of ICT for media education and the training of citizens to be more critical; and to come away with the ability to recognize and analyse new forms of creation and reception of cultural output.

This subject emphasizes the educational method based on the process, so the teaching strategies are specifically directed towards active student participation and group work. To meet this objective, we use the blog as a didactic instrument for sharing knowledge contributed by university teachers and students alike. This course has also generated complementary activities such as seminars, workshops and conferences that have enabled students to meet professionals working in the fields of culture and communication in their various facets.

4. Conclusion

The education of active audiences means that teaching-learning models need to be created and inserted into university curricula. These models should give students free rein to express themselves and they must reflect constantly on the new logic of interlocution. Neither the interactivity nor the technological possibilities offered to contemporary audiences are sufficient to develop a knowledge society; only an integrated form of education that makes best use of the immense potential of the new value chain that the current digital context provides can transform the new audiences into engaged producers and critical users of a communication that is truly global, participatory and integrated.

Notes

[1] Indicators that track the information society. Ministry of Industry, Tourism and Commerce, Government of Spain, May 2011.

References

CARLON, M. & SCOLARI, C. (2009). *El fin de los medios masivos. El comienzo de un debate.* Buenos Aires: La Crujía.

CASTELLS, M. (2009). *Comunicación y poder*. Madrid: Alianza.

FERRÉS, J. (2010). Educomunicación y cultura participativa. In APARICI, R. (Coord.). *Educomunicación: más allá del 2.0.* Barcelona: Gedisa; 251-256.

FUNDACIÓN TELEFÓNICA (2008). *La generación interactiva en Iberoamérica. Niños y adolescentes ante las pantallas.* Barcelona: Ariel.

GARCÍA-CANCLINI, N. (1994). *Consumidores y ciudadanos. Conflictos multiculturales de la globalización.* México: Grijalbo.

GARCÍA MATILLA, A. (2010). Publicitar la educomunicación en la universidad del siglo XXI. In APARICI, R. (Coord.) (2010). *Educomunicación: más allá del 2.0.* Barcelona: Gedisa.

GIDDENS, A. (1996). *In Defense o Sociology.* Cambridge: Polity Press.

JACKS, N. (Coord.) (2011). *Análisis de Recepción en América Latina. Un recuento histórico con perspectivas al futuro.* Quito: CIESPAL.

JENKINS, H. (2008). *Convergence Culture. Where Are Old and New Media Collide.* New York: New York University Press.

JENKINS, H. (2009). *Confronting the Challenges of Participatory Culture. Media Education fot the 21st century.* EUA: MacArthur Foundation.

JENKINS, H. (2011). *From New Media Literacies to New Media Expertise: Confronting the Challenges of a Participatory Culture*

(www.manifestoformediaeducation.co.uk/2011/01/henryjenkins) (11-01-2011).

JENSEN, K. (2005). Who do You Think We Are? A Content Analysis of Websites as Participatory Resources for Politics, Bussines and Civil Society. In JENSEN, K. (Ed.). *Interface/Culture*. Copenhagen: Nordicom.

JENSEN, K. (2010). *Media Convergence: The Three Degrees of Network, Mass and Interpersonal Communication*. London: Routledge.

MANIFESTO FOR MEDIA EDUCATION (2011). *A Manifesto for Media Education* (www.manifestoformediaeducation.co.uk) (10-02-2011).

MARTÍN-BARBERO, J. (2004). *La educación desde la comunicación*. Buenos Aires: Norma.

NAVARRO MARTÍNEZ, E. (2008). Televisión y literatura. *Afinidades, I,* invierno; 88-97.

PEW INTERNET AND AMERICAN LIFE (2005) (www.pewinternet.org/Reports/2005/How-the-internet-has-woven-itself-into-American-life.aspx) (10-11-2010).

POSTMAN, N. (1991). *Divertirse hasta morir. El discurso público en la era del Show Business*. Barcelona: Tempestad.

OROZCO, G. (2010). *La condición comunicacional contemporánea: desafíos educativos para una cultural participativa de las audiencias*. Barcelona: Congreso Anual del Observatorio Europeo de Televisión Infantil (OETI).

OROZCO, G. (2011). *Audiencias ¿siempre audiencias? El ser y el estar en la sociedad de la comunicación*. México: AMIC, XXII Encuentro Nacional AMIC 2010.

REPOLL, J. (2010). *Arqueología de los estudios culturales de audiencias*. México: UAM.

RHEINGOLD, H. (2002). *Multitudes inteligentes. La próxima revolución social*. Barcelona: Gedisa.

SCOLARI, C. (2009). *Hipermediaciones. Elementos para una teoría de la comunicación digital interactiva*. Barcelona: Gedisa.

WHITE, M. (2006). *The Body and the Screen. Theories of Internet Spectatorship*. EUA: Massachusetts Institute of Technology.

WINOCUR, R. (2009). *Robinsoe Crusoe ya tiene celular*. México: Siglo XXI.

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Media Competence. Articulated Proposal of Dimensions and Indicators

La competencia mediática: propuesta articulada de dimensiones e indicadores

ABSTRACT

The changes occurring in the media environment over the last decade force us to revise the parameters from which media education is to be implemented today, in a new age of communications. This article seeks to provide some criteria that media education or media literacy should follow, and especially a coordinated proposal of dimensions and indicators to define the new media competence. The proposal has been made by the authors of this article from the contributions made by 50 renowned Spanish and foreign experts in Media Literacy. The proposal focuses on six major dimensions: languages; technology; interaction processes; production and dissemination processes; ideology and values, and the aesthetic dimension. And it is structured around two areas of work in every dimension: the production of their own messages and the interaction with outside messages. We propose to develop this media education in the context of participatory culture, combining critical and aesthetic thinking with the expressive capacity; the development of personal autonomy with social and cultural commitment. Finally, we propose to combine technological revolution with neurobiological revolution, assuming changes produced in the conception of the human mind, especially as regards the importance of emotions and unconscious processes over reasoned and conscious ones.

ABSTRACT (Spanish)

Los cambios que se han producido en el entorno comunicativo durante la última década obligan a revisar los parámetros desde los que se ha de impartir la educación mediática. En este artículo se ofrecen algunos criterios que deberían presidir esta educación y, sobre todo, una propuesta articulada de dimensiones y de indicadores para definir la nueva competencia mediática. La propuesta ha sido realizada por los autores y ajustada a partir de las aportaciones hechas por 50 reconocidos expertos, españoles y extranjeros, y gira en torno a seis grandes dimensiones: lenguajes, tecnología, procesos de interacción, procesos de producción y difusión, ideología y valores, y dimensión estética. Y está estructurada en torno a dos ámbitos de trabajo: el de la producción de mensajes propios y el de la interacción con mensajes ajenos. Se propone desarrollar esta educación en el marco de la cultura participativa, compaginando el espíritu crítico y estético con la capacidad expresiva, el desarrollo de la autonomía personal con el compromiso social y cultural. Se pretende, en fin, compaginar la revolución tecnológica con la neurobiológica, asumiendo los cambios producidos en la concepción de la mente humana, sobre todo en lo referente al peso de las emociones y del inconsciente sobre los procesos razonados y conscientes.

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1. Introduction

Between 2005 and 2010, a research project was carried out in Spain financed by the Catalan Audiovisual Council (CAC) and the Ministry of Education to assess the level of media competence in the country's citizens (Ferrés & al., 2011). The findings of the investigation were based on 6,626 questionnaires, 31 in-depth interviews and 28 group discussions that took place across Spain during that five-year period. The sample was stratified according to age (16 to 24, 25 to 64, 65 and over), gender and educational level.

Seventeen universities, one from each of Spain's regional autonomous communities, took part in the project which was coordinated by Barcelona's Pompeu Fabra University. A document was drawn up by a group of experts at the start of the investigation to identify the dimensions and indicators by which the extent of media competence was to be defined (Ferrés, 2006; 2007).

Along similar lines, three other research, investigation and development projects are currently in progress, financed by the Ministry of Science and Innovation and directed by Dr. Joan Ferrés, of the Pompeu Fabra University, Dr. Ignacio Aguaded, at the University of Huelva and Dr. Agustín García Matilla, from the University of Valladolid in the city of Segovia.

These three projects aim to diagnose the needs of three important institutions or collectives involved in media competence for citizens: university education (in the disciplines of communication and education), compulsory education and the professionals who work in communication.

Much has changed in the world of media communication since 2005. There has been a significant transformation in the communicative landscape due to the appearance of new technological devices and communicative practices. These changes have altered the definition of media competence by adjusting the formulation of dimensions and incorporating new indicators.

The authors of this article drew up a draft document for a proposal of dimensions and indicators that updated the one published in 2006 and 2007, taking into account new work on the subject that has been produced in recent years (The High Council for Media Education, 2008; European Commission, 2010). This document was sent to several international experts in media literacy requesting their collaboration in the assessment of this field and in proposing changes. The document's definitive proposal, as presented in section 3, includes the majority opinions of those experts who responded to our request.

2. Defining concepts and discarding erroneous notions

2.1. The concept of competence

The concept of competence comes from the world of business and labor, and has been adopted by academia to the point where it is now the key concept in educational reform in the majority of European Union member states, including Spain. Competence is understood as a combination of the knowledge, skills and attitudes deemed essential for performing a task within a specific context.

It is precisely this concept's origin in work and the professions that provokes misgivings in some experts. If this concept is still valid despite these misgivings, it is because the concept is not subject to an instrumental interpretation of measureable impact. A broader definition of competence does not necessarily assume that media education guarantees professional workforce development efficacy but instead sees it as a pathway for a wide range of personal development opportunities. Media competence has to contribute to the development of citizens' personal autonomy and social and cultural commitment.

2.2. Dimensional functionality

The dictionary of Spain's Royal Academy defines «dimension» as «each magnitude of a set that serves to define a phenomenon». The phenomenon of communication, like all human phenomena, should be viewed holistically. None of its components can be explained in any other way than by the total sum of their symbiotic interactions. Nonetheless an overall understanding of the phenomenon requires the specification and differentiation of each of the relevant magnitudes so that none are overlooked in the analysis and expressive practice.

In the phenomenon of media education, language, for example, cannot be understood without technology. Likewise, neither can ideology or aesthetics be understood without language. So nothing prevents approaches to the phenomenon of media education in school or university praxis from being polarized by prioritizing the technological dimension over the linguistic dimension; just as there are approaches to the dimensions of technology and languages that simply enable students to reproduce the formulaic production of the conventional mass media in an uncritical way. That is, these approaches focus on the media languages but marginalize their ideologies and values. Or they concentrate on languages but neglect the aesthetic dimension. These six clearly defined dimensions seek to avoid these types of reductionist approaches.

2.3. The integrative nature of the proposal

This proposal owes much to the work of Jenkins (2008; 2009), one of the foremost analysts of the social and educational implications of the new media and communication environment. For Jenkins, the new media literacies should include the traditional literacies (Jenkins, 2009: 29). The old and the new coexist in the new environment. While the potential to transmit personal or collective messages to the rest of society is greater than ever for all citizens, media power is more concentrated than ever in the hands of a few (Jenkins, 2009: 110-111). These power brokers also benefit from the transparency that characterizes the new representative systems, which blurs representation and reality. Media competence has to deal with this complexity by supporting participatory culture at the same time as developing critical capacity.

2.4. The flexibility of the indicators

Media literacy must be the birthright of all citizens, not just children and young people; with that in mind, this proposal is aimed at all ages, proffering dimensions and general, flexible indicators with the idea that they can be adapted to each specific educational situation according to the age and cultural scope of the intended media literacy learner.

This flexibility applies to the document in general and to each of the indicators in particular. Since the world of media and communication is in a process of constant transformation, if follows that the approaches to media education will also have to change, and constantly.

So, this document can never be considered definitive or closed. The research and daily practice of media teachers will mean that a constant revision and updating of the document will be necessary.

2.5. The work areas

One of the main changes in the new media environment is the emergence of the age of the «prosumer», in which citizens have as many opportunities for producing and disseminating their own messages as for consuming the messages of others. The dimensions and indicators of this proposal are structured around two major work areas: analysis and expression. In other words, a person must develop media literacy by interacting in a critical way with the messages produced by others, and must also be capable of producing and disseminating his or her own messages.

2.6. A playful proposal for media literacy

This proposal for dimensions and indicators might give the impression that media literacy could become a motley compendium of more or less abstract content

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with some highly charged semiotic components. To dispel this notion, the authors contend that media literacy should be taught in an active, participative and playful way. It should focus more on personal reflection on the experience of interaction with media screens and devices than on abstract semiotic discourse and intensive study. An example of a supposedly abstract principle is one which corresponds to the technology dimension: «The capacity to manipulate sounds and images based on the awareness of how representations of reality are constructed».

Does fulfilment of this principle demand that we resort to semiotic discourse? An example of a more playful approach to media education can be seen in the didactic material produced by the Catalan Audiovisual Council (Obach & Ferrés, 2007: 69-71). In one exercise, participants are shown images that the Reuters news agency sent to television stations across the world on one particular day on the subject of the

harsh conditions in Liberia during its civil war. There are 25 images. The participants are asked to imagine that they are TV news editors, and they are to run this story, but the deadline is tight. Each participant is to quickly choose five images and arrange them in their order of presentation. Then, each person attempts to justify the shots chosen. It is a highly effective game. Each news story presented differs from the rest, but which is the best? Which choice is valid or the most

> The technological and neurobiological revolutions work together to strengthen the participatory dimension of the communicative processes. Participation cannot be relegated to the area of expression. The media analysis process also needs to be tackled from an active, dialogical approach taking into account the participation of the media consumer or user via processes of selection, interpretation, acceptance and rejection, criticism, dissemination, etc.

objective? In this example, the participants learn how to construct representations of reality by playing a game, and there is no need for abstract theories, intensive study or semiotic discourse. Just play.

2.7. The neurobiological revolution

Educators tend to be much more predisposed towards incorporating changes arising from the technological revolution into the teaching-learning processes than they are to accepting contributions from the neurobiological revolution. Neuroscience has radically altered many of the convictions held for centuries in Western culture on the workings of the human mind. Neuroscience urges us to «change the way we think about ourselves forever» (Ratey, 2003: 11). In educational practice, we seem more willing to change our way of thinking about the media but far less inclined to alter our view of ourselves as active extensions of these media.

The changes referred to by neuroscience are related to the influence of the emotive and unconscious processes on the conscious mind. These processes are largely ignored in the praxis of media literacy.

Media literacy based exclusively on the conscious

processes is insufficient because we now know that, in the words of the neurobiologist LeDoux (1999: 32), «the conscience can only be understood if the unconscious processes that make them possible are studied».

Similarly lacking would be media education that ignores the emotional dimension of the people interacting with screens because we are now aware that reason (and consequently the critical spirit) is highly vulnerable to attacks of the emotions that are entirely unreasonable.

So, media literacy requires the development of critical thinking alongside a critical spirit because, as a consequence of the dominance of the emotional over the rational part of the brain, it is more realistic to refer to the human being as a rationalizing rather than a rational animal.

Finally, media literacy will never be effective unless it clearly signals that media and communication technologies can only encourage participative culture and personal independence if they support the individual's management of emotional capital. According to Jonah Lehrer (2009: 26), «Reason without emotion is impotent».

2.8. A participatory approach

The technological and neurobiological revolutions work together to strengthen the participatory dimension of the communicative processes. Participation cannot be relegated to the area of expression. The media analysis process also needs to be tackled from an active, dialogical approach taking into account the participation of the media consumer or user via processes of selection, interpretation, acceptance and rejection, criticism, dissemination, etc.

The spirit of participatory culture should be integrated across all methods, proposals and approaches to media literacy education. The intense scrutiny of a product is incomplete if it does not come with, or is not preceded by, the x-ray of the reactions of the person interacting with the product.

The analysis of the meaning of the message is of no use if it does not come with the analysis of the media effects on the person who receives that message. And the deep analysis of what the person thinks about the media product has no validity unless it

comes with an equally profound analysis of what he or she feels about it.

3. Media competence: dimensions and indicators

Media literacy shares the domain of knowledge, skills and related attitudes with six basic dimensions derived from the principle indicators. According to the case in question, these indicators relate to the area of participation, such as when people receive messages and interact with them (areas of analysis) and when people produce messages (areas of expression).

3.1. Languages
a) Areas of analysis include the ability to:
• Interpret and evaluate the various codes of representation and the function they perform within a message.
• Analyze and evaluate the messages from the perspective of sense and meaning, from narrative structures and the conventions of genre and formating.
• Understand the flow of stories and information from multimedia, networks, platforms and modes of expression.
• Establish links between texts –intertextuality–, codes and media, producing knowledge that is open, systematized and interrelated.

b) Areas of expression include the ability to:
• Express oneself via a wide range of systems of representation and meaning.
• Choose between different systems of representation and different styles according to the communication situation, the type of content to be transmitted and the type of user.
• Modify existing products, conferring new meaning and value to them.

3.2. Technology
a) Areas of analysis include the ability to:
• Understand the role played by the information and communication technologies in society, and their possible effects.
• Interact in a significant way with media that enables the user to broaden his or her thinking skills.
• Handle technological innovations that make multimodal and multimedia communication possible.
• Manage hypermedia, transmedia and multimodal environments effectively.

b) Areas of expression include the ability to:
• Use media and communication tools effectively in a multimedia and multimodal environment.

• Apply technological tools to achieve communicative objectives.
• Produce and manage sounds and images with an awareness of how representations of reality are constructed.

3.3. Interaction processes
a) Areas of analysis include the ability to:
• Choose and review media content and make a self-assessment on the basis of conscious and reasonable criteria.
• Ability to discern why certain media, products or content are popular and why they are successful individually or collectively: the wants and needs that satisfy the senses, emotions, and stimulate the cognitive, aesthetic and cultural interest, etc., of audiences.
• Evaluate the cognitive effects of the emotions: to be aware of the ideas and values associated to people, actions and situations which generate positive and negative emotions according to the case in question.
• Understand and manage the disassociations that sometimes occur between sensation and opinion, and emotionality and rationality.
• Express an awareness of the importance of context in the interactive process.
• Understand basic concepts of audience, of audience studies, their usefulness and limitations.
• Appreciate messages from other cultures, for intercultural dialogue in an age of media without borders.
• Manage leisure media and use them as learning opportunities.

b) Areas of expression include the ability to:
• Demonstrate active participation in the interaction with screens, understood as an opportunity to construct a more complete citizenry, an integral development, to be transformed, and to transform the environment.
• Carry out collaborative work via connectivity and the creation of platforms for social networks.
• Interact with people and diverse collectives in environments that are increasingly plural and multicultural.
• Recognize and report infringements of the laws relating to audiovisual material, and know how to act responsibly in these situations.

3.4. Production and dissemination processes
a) Areas of analysis include the ability to:
• Know the basic differences between individual and collective productions, and between popular and

corporate productions; in the case of the latter two, between productions by citizens and those of authorities of private or public ownership.

• Recognize factors that transform corporate productions into messages subject to the socio-economic cultures of these industries.

• Recognize basic conventions for production systems, programming techniques and broadcasting mechanisms.

• Know the rules and self-regulatory codes that protect and regulate the various social actors, of the groups and associations that oversee compliance.

b) Areas of expression include the ability to:

• Know the phases of the processes of production and the infrastructure necessary for individual, group or corporate productions.

• Collaborate in the production of multimedia or multimodal products.

• Select meaningful messages, and use and transform them to make new meanings.

• Share and disseminate information through traditional media and social networks, making the messages more visible, and promoting interaction with expanding communities.

• Manage one's own online/offline identity, and to maintain a responsible attitude towards the control of the individual's private data and those of others.

• Assimilate the concept of individual or collective authorship, to have a responsible attitude towards the rights of intellectual property, and to posses the skill to make the best use of resources such as «Creative Commons».

• Generate and maintain a commitment to networks of collaboration and interactive dialogues with extensive feedback loops.

3.5. Ideology and values
a) Areas of analysis include the ability to:

• Discover how media representations structure our perception of reality, often through unnoticed communications.

• Evaluate the reliability of sources of information, drawing critical conclusions about what is said and what is not said.

• Search for, organize, contrast, prioritize and synthesize information from different systems and environments.

• Detect the intentions and interests that underlie corporate and popular productions, their ideology and values, latent or patent, and take a critical stance towards them.

• Maintain an ethical attitude towards downloading products that can be used for consultation, documentation or entertainment.

• Analyze individual and collective virtual identities, and detect stereotypes, especially in terms of gender, race, ethnicity, social class, religion, culture, disabilities, etc, analyzing causes and consequences.

• Critique the effects of opinion forming, and the cultural homogenization promoted by the media.

• Recognize that empathy with people and stories in media can be used both as a mechanism for manipulation and as an opportunity for self-knowledge and new experiences.

• Manage our own emotional responses when interacting with screens, according to the ideology and values that these screens evoke.

b) Areas of expression to include the ability to:

• Use new media and communication tools to transmit values and contribute to improving the environment based on social and cultural commitments.

• Make products and modify existing ones in order to question the values and stereotypes in certain media productions.

• Use the new media tools for active and civic participation.

3.6. Aesthetics
a) Areas of analysis to include the ability to:

• Enjoy formal aspects of media, that is, not only of what is communicated by also how it is communicated.

• Recognize a media production that does not satisfy minimum aesthetic requirements.

• Relate media productions to other artistic output and detect mutual influences.

• Identify basic aesthetic categories like formal and thematic innovation, originality, style, schools and trends.

b) Areas of expression to include the ability to:

• Produce elementary messages that can be understood and which help to raise the level of personal or collective creativity, originality and sensibility.

• Appropriate and transform artistic productions, boosting creativity, innovation, experimentation and aesthetic sensibility.

Notes

1) Spanish experts: Ignacio Aguaded, José María Aguilera, María Cinta Aguaded, Roberto Aparici, Sue Aran, Antonio Bartolomé, Magda Blanes, Julio Cabero, Daniel Cassany, María del Rocío Cruz, Pilar de las Heras, Patricia Digón, Manuel Fandos, José

Antonio Gabelas, Agustín García Matilla, Alfonso Gutiérrez Martín, Laura López, María Lozano, Carmen Marta, Enrique Martínez-Salanova, Estrella Martínez Rodrigo, Rafael Miralles, José Manuel Pérez Tornero, Antonia Ramírez, Paula Renes, Jacqueline Sánchez, Josefina Santibáñez, Ana Sedeño, Fernando Tucho, Alejandra Walzer.

2) International experts: Claudio Avendaño (Chile), Frank Baker (USA), Marlene Blois (Brazil), Catharina Bucht (Sweden), Abel Carlier (Belgium), Susanne Ding (European Commission), Nicoleta Fotiade (Rumania), Divina Frau-Meigs (France), Tania María Esperón Porto (Brazil), Valerio Fuenzalida (Chile), Nathalie Labourdette (European Commission), Roxana Morduchowicz (Argentina), Sara Pereira (Portugal), Salvador P. Ottobre (Argentina), Ida Pöttinger (Germany), Daniel Prieto (Argentina), Vânia L. Quintâo (Brazil), Vitor Reia-Baptista (Portugal), Tapio Varis (Finland), Klas Viklund (Sweden).

References

COMISIÓN EUROPEA (2010). *Study on the Current Trends and Approaches to Media Literacy in Europe* (http://ec.europa.eu/culture/media/literacy/docs/studies/study.pdf) (12-06-2011).

FERRÉS J. & AL. (2011). *Competencia mediática. Investigación sobre el grado de competencia de la ciudadanía en España*. Madrid: Ministerio de Educación.

FERRÉS J. (2007). La competencia en comunicación audiovisual: dimensiones e indicadores. *Comunicar, 29*; 100-107.

FERRÉS, J. (2006). La competència en comunicació audiovisual: proposta articulada de dimensions i indicadors. *Quaderns del CAC, 25*; 9-18.

JENKINS, H. (2008). *Convergence Culture. Una cultura de la convergencia*. Barcelona: Paidós.

JENKINS, H. & AL. (2009). *Confronting the Challenges of Partipatory Culture. Media Education for the 21St Century*. Massachusetts: The MIT Press.

LEHRER, J. (2009). *How We Decide*. New York: First Mariner Books.

LEDOUX, J. (1999). *El cerebro emocional*. Barcelona: Ariel / Planeta.

OBACH, X. & FERRÉS, J. (2005). *¿Cómo ver la televisión? Material didáctico para niños y jóvenes*. Madrid: Ministerio de Educación y Consell de l'Audiovisual de Catalunya.

THE HIGH COUNCIL FOR MEDIA EDUCATION (Ed.) (2008). *Declaration of Brussels* (www.declarationdebruxelles.be/en/declaration_accueil.php) (12-06-2011).
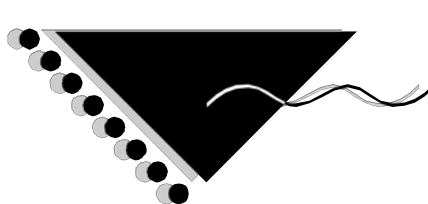
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● John Potter & Shakuntala Banaji
London (UK)

Social Media and Self-curatorship: Reflections on Identity and Pedagogy through Blogging on a Masters Module

Medios sociales y autogestión del perfil digital: identidad y pedagogía con blogs en un máster

ABSTRACT

The widespread uses of social media have been celebrated as a unique opportunity to redesign innovative learning environments that position students at the center of a participatory, multiliteracy and peer learning experience. This article problemitizes the connection between the social uses of new media and relevant educational practices and proposes more rigorous theoretical frames that can be used to guide future research into the role of social media in education. This article reports on a case study of a small group of students who use an online module to study media, culture and communication as part of a wider master's programme. The students were invited to reflect in a more reflexive and theoretical manner than is commonly used in a standard course evaluation about their experiences of engaging with social media as both the medium and the subject of the course. The article discusses the student experience as it unfolded in the context of an assessed piece of project work. In discussing the findings the authors locate the arguments in the context of debates about new literacies, pedagogy and social media as well as in an emergent theory of self-curatorship as a metaphorical frame for understanding the production and representation of identity in digital media.

ABSTRACT (Spanish)

El uso de los medios sociales se ha extendido notablemente y se considera ya como una oportunidad única para el diseño de entornos innovadores de aprendizaje, donde los estudiantes se conviertan en protagonistas de experiencias de multialfabetización participativas y entre iguales. El trabajo cuestiona la conexión entre los usos sociales de los nuevos medios y las prácticas educativas relevantes, y propone marcos teóricos más rigurosos que puedan orientar en futuras investigaciones sobre el papel de los medios sociales en la educación. El trabajo reflexiona sobre el estudio de caso llevado a cabo en un grupo de alumnos en un módulo on-line como parte de un programa de máster sobre medios de comunicación, cultura y comunicación. Se invitó a los estudiantes a desenvolverse en estrategias de evaluación más allá de las convencionales, con el fin de teorizar y reflexionar sobre sus experiencias con los medios sociales como soporte y materia del curso. El artículo analiza la experiencia de los estudiantes evaluados en el conjunto del proyecto. Durante la exposición de resultados, los autores situaron los argumentos en el contexto del debate sobre las nuevas alfabetizaciones, la pedagogía y los medios sociales, así como en el marco de la teoría emergente de la autogestión del individuo en estos contextos, como marco metafórico para comprender la producción y la representación de la identidad en los medios digitales.

KEYWORDS

Social media, identity, pedagogy, literacy, blogging, innovative, assessment, masters level, curatorship.
Medios sociales, identidad, pedagogía, alfabetización, blogging, evaluación, innovación, máster.

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1. Introduction
1.1. Social media, pedagogy and literacy

The rise of social networks such as Facebook and of social media activities such as blogging, photo and video sharing have been widely explored in literature which seeks to position them variously as socio-technical phenomena (Katz, 2006) as instances of youth media production (Barker, 2009; Boyd, 2007) and as liberating and groundbreaking communicative activities worldwide, especially in the affluent networked societies of the developed world. For the most part, they use traditional methodologies drawn from socio-cultural theory, including the use of audience studies (adapted to incorporate the notion of audience as producer), large-scale surveys and smaller scale interviews. The studies also draw from an educational theory base. A raft of enthusiasts and evangelists for the potential of online social spaces have begun to write about their impact on education and the rise of the user as author, peer learning, new participatory cultures and literacies (Duffy & Bruns, 2006; Jenkins, & al., 2006; Rettberg, 2008; Williams & Jacobs, 2004).

According to some scholars, this is not an unproblematic endeavour, enmeshed as it is with an over celebration of technology of and for itself (Buckingham, 2007). Critics contend that too much of the literature that promotes social media's potential for education lacks the rigorous and overarching theoretical frame that is needed to explore and reconcile student practices with new media with educational practice. In an attempt to map out future directions for teaching and research in the field, this article attempts to explore the celebratory claims about the integration of new technology tools in educational environments. On one level, it is concerned with reporting the experiences of a small group of students on a Masters degree in Media, Culture and Communication. On another level, the analysis of the student experiences and activities presents an opportunity to theorize and present potential research questions to guide further empirical research in social media and learning.

1.2. Exploring usable theories and frameworks

Participation, affinity and identity are common themes throughout the research literature about the context of social media and learning (Dahlgren, 2007; Gee, 2004; Ito & al., 2009) together with frameworks that allow us to see how «socialising» the various activities might be a useful construct for examining the phenomena (Crook, 2001). As Merchant (forthcoming, 2012) points out, the benefits of exploring those themes within formal educational settings too often

end up being described rather than actually theorised. Thus, many studies report that young people are engaging with informally organised networks in ways which simply must have a means of mapping onto educational settings and systems, if only the systems were permeable and permissive and allowed for the simple integration of technological tools to think and interact with.

This is a major gap in thinking for at least two reasons. First, there is no easy way of bringing together the arguments made about identity and representation in socio-cultural theory (Goffman, 1990; Giddens, 1991) with those made in learning theory (Wenger, 1998) At best we can describe the sorts of dispositions and skills which learners appear to have by their activity in such spaces and turn to diverse networked theories of learning (Engeström, Miettinen, & Punamäki, 1999; Gee, 2004; Wenger, 1998) to allow us to discern mappings to educational practice. Second, educational experience is bound up in learner identity theory and is not always accounted for in discussions about the open and performative spaces of social media in informal spaces such as peer networks.

Two theoretical frames show promise as a way to bridge this gap. First, scholars have explored the way that social capital is obtained through the uses of social media by individuals and groups in much of the same way that that social capital is obtained in other social spaces (Hargitai, 2007). Second, theories of identity which are concerned with building on conceptions of performance (Goffman, 1990) and notions of ontological (in)security (Giddens, 1991) can be framed in the context of new literacies.

Thus, the usable and useful frameworks in this study are drawn from meta-level discussions of identity theory in combination with social capital and learning theory. In thinking about how learners represent themselves in digital media we also need to think more about how aspects of identity are played out in the context of educational systems, particularly assessment systems. If, as Merchant and others have asserted, digital media reveal the «anchored and transient» representations of the self as presented by learners (Merchant, 2005), what does this mean for education at all levels? In this regard, it becomes important to locate this study within the context of assertions about major changes to the status and organisation of the 'self' in new media.

1.3. Contexts: The module and the students

Internet Cultures, the module, on which students aged 20-50 were working in this study, was one

option on a masters programme concerned with media, culture and communication. It was devised to join other production and critical theory modules in order to move the whole programme, and its students, forward into a more productive engagement with new social media forms. One of the key theoretical frames in the module, as noted above, was provided by Lievrouw and Livingstone (2006).

This enabled the students to approach the subject from three different perspectives. First, they could consider the artefacts or devices used to communicate or convey information and how these were changing. Second, they could look further at the practices in which people engage to share information. Finally, they could begin to question the 'newness' of the new social arrangements which evidently develop around these devices, tools and associated practices. In particular, they could examine both the enthusiastic claims for the uses of social media tools in education (Downes, 2004) and the more measured, reasoned and even sceptical accounts (Buckingham, 2007; Selwyn, 2010).

All students were expected to create and maintain a blog during the course, thus becoming the agents in the study and also the self-reflexive objects of the study. Students were asked to keep the blog at least during the 10 weeks of the module, with the aim, not of studying blogging as a form, so much as using the blog as a vehicle with which to engage with the wider aspects of online social media, pedagogy and identity formation. At the end of that time, they were expected in written work to reflect on the process in the light of their experience, their posts and their exchanges with fellow students, tutors and comments from the wider Internet. They were also expected to write in the light of theoretical readings which were provided for them and/or which they located themselves.

The module design encompassed a mixed mode delivery. An all day face to face session at the start of the summer term set out the parameters for explora-

tion, provided some initial theoretical input, and allowed students to start blogging. A similar day two thirds of the way through the module gathered thoughts developed so far from amongst all of the blogs, reviewed the main issues and set out how these were to be turned into assignments and critical, reflective accounts of experience. WordPress was used as the main vehicle for the blog creation, allowing students to make connections and to write in the simplest form possible. It was used in partnership with a Virtual Learning Environment to raise issues of troubleshoo-

We could argue that this process has engendered what a great many instances of new technologies do, that is, they make visible certain processes and practices which were previously invisible. Thus the blogs in the module, to an extent like social networking sites, were revelatory, not in the sense that they were fostering inherently new processes so much as rendering them newly visible. There is a difference because in the former, the case can be made by enthusiasts and evangelists alike of the essentialism of the technology to the process. In the latter case, the emphasis is on the everyday lived experience of culture amongst the participants with the blog as a catalyst.

ting to do with the course more generally as well as to present resources and activities week by week (Potter, 2008).

The subject matter for the blogs, which was self-chosen, ranged from political analysis in a specific sphere such as civic participation or critical pedagogy, personal diaries, hobbies and pastimes, through cultural experiences in diary form of living in London (a frequent subject for students from different countries) and academic treatises.

The student body on the Internet Cultures module fell into two distinct groups: teachers and non-teachers. As a result of this breadth of experience, expectations were differentiated. For students who were working as teachers and who wished to create a blog

based on their professional life, the blog existed as a separate entity from their own written exchanges and reflections during the course which were located inside the course Virtual Learning Environment. For the rest of the students who were not teaching but working in media settings or studying, the blog itself was the main vehicle for both the practical task and the critical reflection. The following diagram represents the balance between practice and theory in the course:

2. Material and methods
2.1. Research questions and methodology

There were three research questions, as follows:

• To what extent does the experience of participating in social media activities in an academic capacity enable one simultaneously to explore and to research such spaces and activities?

• In this context, what does it actually mean to learn and to be assessed in such spaces?

• Finally, how do students mesh such potentially theoretically challenging experiences with their everyday experiences of culture, work, leisure and family life?

The case study approach suggested itself for two reasons. The first was to help develop an understanding of the setting at a sufficiently deep level to frame a meaningful interpretation of the texts produced by the bloggers in this instance. The second was to generate a small amount of rich data which give sufficient detail and depth to the close textual analysis of blog posts.

Interview questions were grouped to address the areas bounded by the research questions. We began with questions on the nature of identity and connectedness (Merchant, 2012). We moved on to ask in more detail about the self-revelatory aspects of the blog (Bauman, 2004; Giddens, 1991; Goffman, 1990). We then asked about the balance between critical theory and practice on the module before moving into issues of sustainability beyond the course itself into the lives of the learners.

2.2. Establishing the sample and informed consent

The work took place under the research guidelines of the British Educational Research Association, under informed consent and with guarantees of anonymity. Written consent to publish quotations was obtained from the six subjects who chose to volunteer for the study and all their names and their Wordpress IDs were anonymised.

3. Results

The six participants produced writing in the blogs with a range of topics and interests. Student A wrote a highly personal, mainly text-based blog reflecting on her decision-making process around entering the teaching profession. Student B wrote a blog which moved between the cultural differences she experienced as a foreign student in London and the wider UK. Student C described her blog as mainly being about being herself and «chatting». She lived in the far north of the UK and her blog was written in a personal diary form, documenting events in text and visual modes but simultaneously metaphorically looking over her shoulder at the assessment process. Student D used his blog as a means for reflecting on his PhD proposal looking at issues of critical pedagogy, embodiment and representation in online spaces. Student E was a creative practitioner and lecturer in art and drama. She created more than one blog, used as many of the technical features and widgets provided in the software as she possibly could. Her purpose in creating the blog in this way was to explore creative elements of production and experimentation as well as the boundaries of the technology in relation to offline and non-technological pedagogic practices. Student F engaged with the debates around youth and civic participation online with some posts concerned specifically with digital identities and youth media.

3.1. Feelings on academic blogging
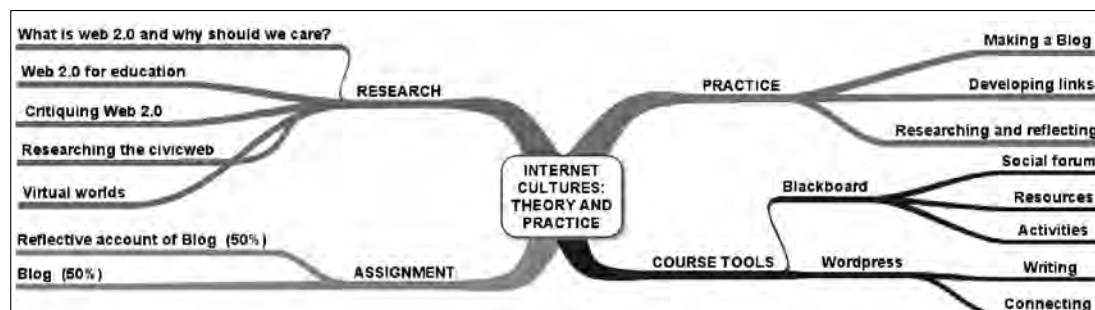
The first group of attitudinal questions about aca-

Figure 1: Map showing the elements of the module featured in the research.

demic blogging revealed a range of responses across the six students. Student A actively liked the idea of having the opportunity to blog as part of an academic course, forcing the pace, but not infringing on personal life and with no particular feelings of self-consciousness in evidence: «As it was a critiqued element of an academic course I was able to blog in a much more regular fashion than I have been able to in the past. It did not infringe on my personal life at all as it was, in effect, my work. I think we all blogged in our own manner, though my blog was perhaps more self-reflective and personal than most».

For student F there was evident discomfort with the experience of being «out there» on the wider Internet which nevertheless was welcomed as a facet of identity construction. There was also tacit acknowledgement in the following quotation of feelings and representations potentially having wider effects amongst the group of bloggers… «I was very happy about having to blog, although there were many aspects about it that made me feel uncomfortable (I should probably clarify that I think «feeling uncomfortable» can be a good thing for learning!) Firstly, I didn't really want to write a personal blog about my life or «inner world». I have too much respect for any possible reader to want to put that kind of stuff out there, however, no offence meant for anyone who does write that kind of blog…».

Others essentialised the blogging experience, reporting that such representations and alignments were a facet of modern living; there was nothing unusual about the process in this respect, it was simply taking its place in the panoply of human activity which is connected with the reflexive project of the self (Giddens, 1991). On having to construct the self in published form in this way through the module, student B noted: «I did not have a problem with that. In our modern world we have to acquire an online identity in order to communicate with others…».

The idea that identity construction is part of co-construction and communication in social media was never far from responses in this first group. However, more than one felt that blogging was essentially «false» in the context of a course, knowing that the act of making the blog was being observed for the purposes of assessment, and that you were effectively confronting the integration of an additional level of performativity into your academic life.

3.2. Self revelation

Self-revelatory questions allowed for these themes to develop further. One of the students developed the argument about the false nature of the work, describing how blogging was about constructing an artifice for exhibition. It made him feel like he was talking to a reflection of himself, but in a public forum. He also made the claim that if he were not writing for the course the format would allow more spontaneity and that his style and voice would be different. Student F wrote: «I have said that I felt that in a way my blogging was 'false', or perhaps 'artificial', how can I explain? I knew I was doing it for a course, so especially at the start it felt a bit like talking to myself in the mirror… I guess that had I started a blog spontaneously, the blog would have been about something else, something I'm passionate about probably, and my style/voice would be different. For the course, I knew I was being 'observed'; if doing it spontaneously I would of course have my imagined audience, perhaps some friends I would tell about my blog, so it would have felt different I'm sure».

Again the sense of falsehood and lack of spontaneity is located as «being down to observation, a condition in which the blog writer continually exists, where self revelation is skewed in some way by the purposes of the blog and by the perceived nature of the observation and the observers.

There was a general consensus, however, among the volunteers, that it was possible to keep the roles and relationships in their right place and actively to enjoy the balancing act through the process. As student C wrote: «I found the whole thing great fun. Once I had started I tried to keep up with blogging regularly. I tried to blog as me - semi personal, but on a course».

Student E felt that the act of self-revelation did not provide the cogency, focus or clarity that she required of herself academically, and produced levels of dissatisfaction with her blog. She took it through many changes. She also began to explore modes of representation which went beyond text into audio and video, in ways in which others did not. She was by far the most experimental of the participants, deleting, changing and moving whole blogs and content in a restless pursuit of self-revelation and bettering of artistic and pedagogic practice. She alluded during this time to the influence of the timing of the course. She wrote: «The first few blogs were a lot about me and exploring the blog arena but once I had attended the first residential that changed. I decided the blog needed a focus and a meaning. We have such a short time on these modules that I feel we need to focus very much on getting as much out of them as possible. I also feel I am not a great writer; there were some blogs that had great simple words and thoughts but that did not work

for me. That does not mean that I did not go searching for a blog that would be very personal to me, it was just expressed in a very visual way».

3.3. Theory v practice balance across the module

In at least one case we found that engagement of the kind available in the module had provoked and stimulated thought about what it meant to be critical and reflective at a deeper level; student F wrote as follows: «On the question of being critical… I feel that «critical» is such an overused word and covers so many different positions and ideologies that it becomes an «empty signifier»… it can be adopted by anyone to mean anything. I certainly felt the space to be critical (according to my own understanding of the word) and I think that is reflected in my blog and course assignment… I expect that if I do a PhD, I might blog in order to help me engage with theory…».

Here there is less apparent concern with the substance and more with the process; this particular student was using the form as a way of writing his way through to more substantial thought; blogging not specifically as reflective tool so much as a method to get into deeper level of engagements in other academic arenas.

Student E expressed the view that there should have been more theoretical input and more opportunity to look more widely at non-blog-based Internet cultures… «I think the blog can be as critical as the individual student wants it to be. Personally, I would have benefited from more theory on the course and more forms of theory regarding non-blogged based Internet cultures». Here we see an argument based on the currency of the form and its connection or disconnection with other social spaces on the Internet, such as virtual worlds and other social networks.

Student C worried that her exploration had not been at a sufficient critical depth but that there was so much work to be done in the whole field of blogging and education, not least to theorise the relationship to literacy practices (of which more below in section 4…). She wrote: «I spent so long exploring I don't think I was that critical. For me there is so much more work to do in this area that I need to go back and review the work. I do think that some of the issues were behind the work in blogging in Education that is happening. Because it is so literacy based there is a lot of work to be done on the future uses and possibilities».

3.4. Impacting on practice in social media and pedagogy

Turning to the influence of the course on activity and identity afterwards, the response from most stu-dents was generally positive about the impact on life outside the confines of the module. Student E reported a huge success in taking her blog out into a formal educational setting. The key for her seemed with which different modalities could be combined in the process, with the key elements of collection and distribution as the most useful properties of the medium. She wrote… «All my group now have media blogs and all the work goes onto their blog. It has changed the classroom…for visual students they can display work without literacy problems and it looks so professional».

Student F pointed out that he wanted to use the blog in future dissertation writing, calling it an «intentional new practice». He said that the experience showed how a blog could be powerful and effective as a place in which to collect a repository of ideas explore them in a form of research journal and also crucially collect feedback from readers.

«My first blog was specifically set up with the ultimate objective of providing me with an online resource to help me define ideas and reflect in preparation for the dissertation. So it was an intentional new practice, one which I intend to continue using throughout the dissertation research / writing period. The experience has also showed me how powerful and effective a blog can be as a mix of research journal / repository of ideas / feedback collection tool».

4. Discussion

Blogging is not a new medium and its history is traceable back to the earliest days of the Internet (Rettberg, 2008). However, its position in the panoply of social media, as a relatively slow and reflective tool, with a degree of end-user control over its modalities and functions, lends itself to academic and educational exploration. Certainly in this module it was a means to explore Internet cultures without engaging principally with issues of privacy and ownership in social networking sites, their content and other ethical issues. These spaces were never far from the students' minds in terms of comparisons, but the blog afforded some quasi-personal distance from the day-to-day presentation and the slower rendering visible of some of the processes of identity construction.

4.1. Identity construction as literacy practice

The students saw the blog as a space in which they presented and represented aspects of themselves within a performative context. In this they were taking part in the cultural practices of representation which exist both inside and outside the formal structures of the course. Since the multiliteracies debates (Cope &

Kalantzis, 2000) the wider definitions of literacy, such as those offered by Brian Street (1985) have served to underline a view of how cultural practices are also literacy practices. The students were being asked to problematise what they experienced as participants in lived culture whilst they simultaneously created content and re-making their identity in a shared, observed space.

In a sense this is nothing new but, following some of the comments from the students themselves, we could argue that this process has engendered what a great many instances of new technologies do, that is, they make visible certain processes and practices which were previously invisible. Thus the blogs in the module, to an extent like social networking sites, were revelatory, not in the sense that they were fostering inherently new processes so much as rendering them newly visible. There is a difference because in the former, the case can be made by enthusiasts and evangelists alike of the essentialism of the technology to the process. In the latter case, the emphasis is on the everyday lived experience of culture amongst the participants with the blog as a catalyst.

4.2. The blog as a form of social media

Blogging itself is the form in which we have used it is not the most common use of social media on the Internet. The intention was never to portray it or attempt to sell it to the students as such. Indeed, as we have seen, our students reminded us in some of their responses that we needed to find ways of exploring the wider experience of life online, including other forms of social networking. We have always discussed these and maintain them as key aspects of personal research and commentary during the course but we acknowledge that we need to amplify that the blog is only the medium and need not be the form under investigation itself.

Blogging allows different modes to become availa-ble to be combined to make meaning but it is uncertain how we account for them fully and this tension goes to the heart of the integration of new literacy practices in a system which is essentially based in old literacy practices. Perhaps the only way to do this is to expand our notions of what is considered to be literacy practice in new media, a debate which a number of academics are now engaged in, trying to locate a way to reconcile semiotics and cultural studies, the multimodal texts and the world in which the texts arise (Burn, 2009).

It requires further study to make sense of how learner and teacher identity plays out in an era in which self-curatorship is a key skill and disposition in new media. For some, certainly not all, young people, this fluid and multifaceted representational world is something they recognise as a cultural practice and as a literacy practice that they are engaging with inside and outside the classroom. It is likely that future pedagogy will need to build on the skills and dispositions of intergenerational groups in social media not least to connect with the need to develop criticality in performative space (Banaji, 2011). Finally, future research should consider how we reconcile the tensions which emerge.

4.3. Collection, distribution and exhibition

Elsewhere there is a growing acknowledgement that the management of the versions of the self in social media is a key skill in late modernity and that this process is also about how this version of the self connects with others, participates in networks and makes sense in a variety of contexts (Wenger, 1998). In some forms of new media production this is characterised as metaphorical process of curatorship (Potter, 2010). This is not the process we know as collection management in museums and archives so much as the collection, distribution and exhibition management of

the self across social media. There is no sense in these literacy activities that the self is ever completely «finished» even, as in the case of these students, at the point of assessment.

4.4. Social media and pedagogy: belonging and criticality in performative space

The process of engaging with social media took the students into a (mostly) productive engagement with words, images, sounds and making connections. Engagement is sometimes celebrated in contemporary media studies literature as an end in itself (Downes, 2004). As Hargittai (2008: 293) has suggested, «the membership of certain online communities mirrors people's social networks in their everyday lives; thus online actions and interactions cannot be seen as tabula rasa activities, independent of existing offline identities». This was played out for and by our students in their expectations of comments from peers or students, their re-framing of their own identities, their anxieties around assessment and the production of a blog as part of an academic exercise, however the rules of the game were far from static. The notion that requiring a blog as part of an academic assessment might be less challenging than writing a traditional academic essay turned out to be quite misplaced in that most of our students were more comfortable and experienced in traditional academic formats than they were in the reflection-made-public mode required by the blog format. It requires further study to make sense of how learner and teacher identity plays out in an era in which self-curatorship is a key skill and disposition in new media. For some, certainly not all, young people, this fluid and multifaceted representational world is something they recognise as a cultural practice and as a literacy practice that they are engaging with inside and outside the classroom. It is likely that future pedagogy will need to build on the skills and dispositions of intergenerational groups in social media not least to connect with the need to develop criticality in performative space (Banaji, 2011).

Finally, future research should consider how we reconcile the tensions which emerge. We could perhaps start by investigating the links to the wider, productive culture in which the module resides, not least in how we can conduct more longitudinal research in the field which sees us investigate the notion of curatorship in new media more fully.

References

BANAJI, S. (2011). Disempowering by Assumption: How the Rhetoric of 'Digital Natives' Affects Young People and Influences Civic Organisations Working with Them. In THOMAS, M. (Ed.). *Deconstructing Digital Natives*. London/New York: Routledge; 49-66.

BARKER, V. (2009). Older adolescents' Motivations for Social Networking Site Use: The Influence of Self. *Cyber Psychology and Behaviour, 1(5)*; 1-39.

BAUMAN, Z. (2004). *Identity: Conversations with Benedetto Vecchi*. Cambridge: Polity.

BOYD, D. (2007). *Why Youth Love Social Network Sites: The Role of Networked Publics in Teenage Social Life*. The John D. & Catherine, T. MacArthur Foundation Series on Digital Media and Learning, 119-142. (doi:10.1162/dmal.9780262524834.119).

BUCKINGHAM, D. (2007). *Beyond Technology: Children's Learning in the Age of Digital Culture*. London: Routledge.

BURN, A. (2009). *Making New Media: Creative Production and Digital Literacies (New Literacies and Digital Epistemologies)*. New York: Peter Lang.

COPE, B. & KALANTZIS, M. (Eds.). (2000). *Multiliteracies: Literacy Learning and the Design of Social Futures*. New York: Routledge.

CROOK, C. (2001). The Social Character of Knowing and Learning: Implications of Cultural Psychology for Educational Technology. *Journal of Information Technology for Teacher Education, 10(1/2)*; 19-35.

DOWNES, S. (2004). Educational Blogging. *Educause Review, 39 (5)*; 14-26.

DUFFY, P. & BRUNS, A. (2006). The Use of Blogs, Wikis and RSS in Education: A Conversation of possibilities. Paper presented at the *Online Learning and Teaching Brisbane*.

ENGESTRÖM, Y.; MIETTINEN, R. & PUNAMÄKI, R.L. (Eds.) (1999). *Perspectives on Activity Theory (Learning in Doing: Social, Cognitive & Computational Perspectives*. Cambridge: Cambridge University Press.

GEE, J.P. (2004). *Situated Language and Learning: A Critique of Traditional Schooling*. New York: Routledge.

GIDDENS, A. (1991). *Modernity and Self-identity: Self and Society in the Late Modern Age*. Cambridge: Polity.

GOFFMAN, E. (1990). *The Presentation of Self in Everyday Life* (New edition). London: Penguin.

HARGITTAI, E. (2007). Whose Space? Differences Among Users and Non-users of Social Network Sites. *Journal of Computer-mediated Communication, 13 (1)*; 14.

ITO, M.; BAUMER, S.; BITTANTI, M.; BOYD, D.; CODY, R. & HERR-STEPHENSON, B. (2009). *Hanging Out, Messing Around & Geeking Out: Kids Living and Learning with New Media*. Camb. Mass: MIT Press.

JENKINS, H.; CLINTON, K.; PURUSHOTMA, R. & ROBISON, A.J. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century Building the field of digital media and learning*. Chicago: MacArthur Foundation; 72.

KATZ, I. (2006). Flickr, Katerina Fake and Stewart Butterfield, Extract from feature on Web 2.0 innovators, *The Guardian Weekend Magazine*. (www.guardian.co.uk/technology/2006/nov/04/-news.weekendmagazine8) (30-07-2011); November 4th, 2006.

LIEVROUW, L.H. & LIVINGSTONE, S. (Eds.). (2006). *The Handbook of New Media* (Updated Student Edition). London: Sage.

MERCHANT, G. (2005). Electric Involvement: Identity Performance in Children's Informal Digital Writing. *Discourse: Studies in the Cultural Politics of Education, 26 (3)*; 301-314.

MERCHANT, G. (2012). Unravelling the Social Network: Theory and Research. (Forthcoming in) *Learning Media and Technology 37 (1)*.

POTTER, J. (2008). Re-designing an MA module to Foster Agency, Engagement and Production in Online Social software. *Reflecting*

Education, 4 (1); 81-91.

POTTER, J. (2010). Embodied Memory and Curatorship in Children's Digital Video Production. *Journal of English Teaching: Practice and Critique, 9 (1)*.

RETTBERG, J.W. (2008). *Blogging*. Cambridge: Polity.

SELWYN, N. (2010). *Schools and Schooling in the Digital Age: A Critical Analysis*. London: Continuum.

STREET, B. (1985). *Literacy in Theory and Practice*. Cambridge: Cambridge University Press.

WENGER, E. (1998). *Communities of Practice. Learning, Meaning & Identity*. Cambridge: Cambridge University Press.

WILLIAMS, J.B. & JACOBS, J. (2004). Exploring the Use of Blogs as Learning Spaces in the Higher Education Sector. Australasian *Journal of Educational Technology, 20 (2)*; 232-247.

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● Elisabeth Soep
 Oakland (USA)

The Digital Afterlife of Youth-Made Media: Implications for Media Literacy Education

Generación y recreación de contenidos digitales por los jóvenes: implicaciones para la alfabetización mediática

ABSTRACT
The digital age has fundamentally re-configured the relationship between makers and users. Every networked action by a user has the potential to be reinterpreted by other users. The original intentions of media makers emerge from this process in recontextualized form that I call the «digital afterlife». The phenomenon of digital afterlife has striking implications for youth-made media, which I explore in this article through an ethnographic analysis of behind-the-scenes activities among a group of young people working with Youth Radio, a California youth organization, where they create high-impact media. The case study examined here centers on a major investigative reporting initiative within Youth Radio – a transmedia series on child sex trafficking produced by a 21-year-old reporter in collaboration with veteran editors. The analysis reveals the ways in which youth media ceases to be «youth media», once it moves into its digital afterlife, given the extent to which the content gets re-produced, again and again, by adult institutions with their own histories, agendas, and political economies. The article concludes by identifying key dimensions of literacy that young people invent and deploy through their experiments with social and mobile media, including: discovery, analytics, network mobilization, and platform programming.

ABSTRACT (Spanish)
La era digital ha reconfigurado las relaciones entre productores y usuarios. Las acciones en red son potencialmente reinterpretadas por otros usuarios. La intención de los productores mediáticos adquiere su sentido en este contexto que denominamos «el más allá digital». En este artículo analizamos cómo ha influido este fenómeno en las implicaciones de los medios y los jóvenes. El estudio se realiza a través del análisis etnográfico de las actividades llevadas a cabo por un grupo de jóvenes que trabajan creando productos mediáticos de gran impacto en una radio en California (Youth Radio). El estudio de caso que se incluye en este artículo se centra en una iniciativa de periodismo de investigación dentro de Youth Radio: una serie transmediática sobre el tráfico sexual infantil producida por un joven de 21 años con la ayuda de editores más veteranos. El análisis desvela la forma en que los medios «juveniles» dejan de serlo una vez que se convierten en un producto digital en sí, cuyo contenido se reproduce una y otra vez en manos de adultos e instituciones con su propia historia, organización y economía política. El artículo concluye identificando dimensiones clave de alfabetización que los jóvenes crean y emplean a través de su experimentación con los medios móviles y sociales, entre otros: el descubrimiento, el análisis, la movilización en red y la programación de plataformas.

KEYWORDS
Youth, media, media literacy, digital afterlife, action, research, media production, networked learning, youth radio, social media.
Jóvenes, medios, alfabetización mediática, huella digital, investigación-acción, producción mediática, red, radio joven, medios sociales.

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1. Introduction

In a speech to a crowd at the 2010 South by Southwest Interactive Festival in Austin (TX) media theorist Douglas Rushkoff declared, «If you are not a programmer, you are one of the programmed... If we don't create a society that at least knows there's a thing called programming, then you will end up being not the programmers but the users, or worse, the used» (March 12, 2010). Technology platforms increasingly organize our lives. In Rushkoff's view, individuals who fail to understand the inner workings of those platforms, and who can't deploy them effectively, will be marginalized from decision-making power and self-determination. If you can't access technology's source codes, you will be outsmarted by thinking machines (Rushkoff, 2010).

That idea echoes media literacy's aim for young people to be active producers, rather than mere consumers, of high quality, original media. And yet, Rushkoff shifts media literacy's standard assumptions and terminology in a provocative way. He replaces the concept of audience with that of the user, implying that in new media, every networked action by a user has the potential for a reaction and recontextualization by other users. In this context of user-driven content, the original intentions of media producers are reinterpreted, remixed and sometimes distorted by users and emerge into a recontextualized form that I call the «digital afterlife».

The digital afterlife has particular implications for youth-made media that originates in schools and community-based organizations. Social media environments are governed by a different set of players, agendas, stakes, consequences, and rules of engagement than those associated with youth-serving institutions. Youth media organizations typically aim to promote youth development, literacy and social justice. Users who join the production process in the afterlife –bloggers, commenters, etc.– do not necessarily share those orientations or pro-social goals.

In this article, I explore the digital afterlife through an ethnographic, participatory analysis of behind-the-scenes activities among a group of young people working with Youth Radio, a California youth organization, where they both create high-impact media and program new technology platforms. In the process, I examine the implications for media producers who attempt to target and tailor their content toward users, rather than audiences, and I raise questions that shift media literacy assumptions and practices.

My research with youth and digital media production challenges Rushkoff's framework of the user as a pitiable soul who is «used». Instead, the user shows up in young people's learning and language, again and again, as the imagined force that drives production. Working as a producer, in other words, requires an ability to embody, enact, and animate the position of the user. What's overlooked, in the denigration of the user, is the extent to which the user directs production. Far from being a pathetic, marginalized character, the user surfaces as the arbiter of any given production's value and likelihood of achieving success. Establishing one's proximity to the user, and being able to anticipate and articulate the user's point of view, are among the smartest moves a producer can make.

In this article, I explore the production process before and after a major investigative reporting initiative within Youth Radio. This ethnographic case study examines the digital afterlife of a multi-part, transmedia series on child sex trafficking in Oakland, California, produced in 2010 by a 21-year-old reporter in Youth Radio's newsroom who collaborated with a team of peers and veteran editors at Youth Radio and National Public Radio. By focusing on this story's digital afterlife –in other words its period of use– I will identify key dimensions of literacy and codes of conduct that young people invent and deploy through their in-depth experiments with social and mobile media.

2. Research site, materials and methods

Founded in 1992 by reporter Ellin O'Leary with San Francisco Bay Area high school students Deverol Ross, Chano Soccarras, Ayoka Medlock, Noah Nelson, and Jacinda Abcarian, Youth Radio is a youth-driven production company and community-based journalism program where young people aged 14 to 24 make and distribute original media and develop emerging technologies across platforms. Young people come to Youth Radio primarily from the nation's economically abandoned public school districts, in which students are often organized into separate academic tracks (remedial, «regular», honors, and advanced placement), and where black and brown youth are disproportionately disciplined and relegated to the poorest schools. At Youth Radio, beginning with students' very first class, they work together to carry out a single, demanding, shared task – producing a weekly live radio show, «Youth in Control», plus all the digital media products (e.g., photos, video, blog posts) that give radio an online presence. In addition to the Oakland headquarters, Youth Radio has bureaus in Los Angeles California, Washington DC, and Atlanta Georgia, as well as editorial collaborations with other youth groups around the US: in a coal-mining

community in rural Eastern Kentucky, a gentrifying Chicago neighborhood, a Native American reservation in Arizona, a juvenile detention facility in the San Francisco Bay Area. Youth Radio's coverage is transnational, with stories in recent years developed by young people in Afghanistan, Iraq, Ireland, Israel, Palestine, India, Pakistan, South Africa, Ghana, and other locations throughout the world.

Recruited by program graduates, students working at Youth Radio's Oakland program begin with introductory transmedia classes and advance through specialized courses and eventually paid positions as media-makers, engineers, and peer educators. Between 35 and 50 are on staff at any given time. Applicants fill out applications and participate in interviews. Recruitment decisions are guided by efforts to fill multiple classes that run four times per year, balancing the student body in terms of gender, geography, and race, and serving primarily low-income youths and young people of color. All programs are free. Students receive individualized education and career counseling, and, in 2007, the organization began offering high school and community college credit and brought on board a licensed social worker who offers one-on-one therapy and leads agency-wide health initiatives.

Youth Radio reporters, commentators, and producers deliver content on deadline to commercial, public, and community-supported radio stations as well as the «San Francisco Chronicle», the «Huffington Post», iTunes, and the Internet's varied social media sites. Through a combination of intensive training, deadline-driven production, and one-time workshops and presentations, the organization reaches more than 1,200 people per year. The newsroom files regularly to public broadcasting shows including NPR's «All Things Considered» and «Morning Edition» and «American Public Media's Marketplace». Youth Radio has been honored with George Foster Peabody, Alfred I. DuPont, Edward R. Murrow, Robert F. Kennedy, Investigative Reporters and Editors, and Gracie Allen Awards. These are honors normally bestowed to newsrooms staffed by journalism veterans at the nation's top public and commercial media outlets. Youth Radio is undoubtedly unusual in the recognition it has received from professional journalists and in its collaboration with mass media outlets. And yet the organization's core values and strategy of leveraging media production to promote youth development and justice are not at all uncom-

> Young people are developing new codes of conduct as they create models for sustaining production beyond publication. Digital media literacy in this context requires tracking and shaping the way your content is recontextualized by others, who have the power to take it in new directions, and apply it to different communities and uses. That doesn't mean jumping into comment streams and protesting every time you read something from a user with which you disagree. But it does require having a network of collaborators who can help guide your decision about when, in fact, it does make sense to intervene when the afterlife of a story takes an unexpected turn, and how to do so effectively. Literacy, in this sense, means knowing your users, trusting your users, and also pushing back against your users when that move is called for.

mon, as evident not least through the other essays in this journal issue. In this sense, Youth Radio products and processes are hyper-visible examples of the kinds of activities young people are developing through cross-generational, interest-driven engagement in neighborhood-based organizations and online communities around the world (Ito & al., 2010). Lessons from Youth Radio, then, hold relevance for any place where young people find, frame, articulate, and spread narratives they feel a pressing need to tell. Implications help in our efforts to understand any site

where adults and young people participate in high-stakes creative projects, with the goal of generating some kind of public awareness, impact, or influence.

«Participation» is a key term in media literacy research, especially since Jenkins (2006) powerfully reframed what had until then been dubbed the «digital divide». Jenkins argued that the source of inequality wasn't necessarily differential access to the technology itself, but to the means of participating, fully and deeply, in the kinds of networked environments that support learning, opportunity, and advancement in, through, and beyond digital activities. Participation is

> Technology platforms increasingly organize our lives. In Rushkoff's view, individuals who fail to understand the inner workings of those platforms, and who can't deploy them effectively, will be marginalized from decision-making power and self-determination. If you can't access technology's source codes, you will be outsmarted by thinking machines.

also a central concept in ethnographic research, which defines my methodology here. In particular, this work relies on methods related to community-based participatory research, or participant action research. These approaches unapologetically privilege participation as a source of insight and means to connect scholarly work with struggles for social justice (Minkler & Wallerstein, 2003; Morrell, 2004; Torre & Fine, 2006).

I participate in my research site in a very concrete way. I work there, as Research Director and Senior Producer. My involvement at Youth Radio started in late 1999, when I began volunteering at the organization while finishing my PhD dissertation. Now I collaborate with youth reporters and technology developers in a model for teaching and learning Vivian Chávez and I have characterized elsewhere as «collegial pedagogy» (citation omitted to preserve blind review). I also research our work by keeping field notes and carrying out interviews with youth and adult staff; recording and analyzing interactions, scripts, and other texts; and tracking products once they enter circulation, always with a focus on implications for learning and literacy. This double perspective, as embroi-

led participant and data-driven observer, is not always comfortable. There are periods of heavy data collection and analysis, and other periods when pressing production demands push those activities to the margin. Certainly there are things I can't (or don't want to) see because I am «in» the work and not standing outside. But there are also special affordances that come with this unorthodox research position. Perhaps most relevant here is a capacity to watch what happens to individual media projects long after an outside researcher would likely have moved on to other questions or sites, and to participate with young people in navigating how that afterlife unfolds.

A final note about methods: One way to frame the research reported here would be as an ethnographic case study located inside a single organization extended over ten years. But that framing would miss the extent to which the work is fundamentally multi-sited (Marcus, 1998). The analysis tracks the formation and dissemination of selected media projects as they shape and are re-shaped by a sometimes stunning range of contexts, institutions, and ideologies that animate their afterlives. Key methodological questions, then, are: Out of what conditions did the media project originate? How did it travel? Who picked it up? How did it change? What difference did it make? To address these kinds of questions, one needs «a mode of study that cares about, and pays attention to, the interlocking of multiple social-political sites and locations» (Gupta and Ferguson, 1997: 37). While «we learn a great deal» about people from single-sited ethnographic studies, argue Dimitriadis & Weis, «what we do not know is what happens to them after they leave these specific locations» (2006: 478). I apply this logic not only to people, but also to media processes and products, and therefore my attention migrates with the media, following the story as it gets embedded and re-produced across time and space.

3. «Trafficked»: A Case Study

In 2010, Youth Radio's newsroom began work on an investigative reporting project that would extend over six months and spread across every department within the organization. It centered on a story that directly touched Youth Radio students' lives and pro-

foundly affected Oakland residents: child commercial sex exploitation. While «trafficking» is typically used in the US to describe transnational sex trade, Oakland is a hub for selling sex with underage American girls living inside US cities, and Youth Radio's editorial staff wanted to draw attention to this phenomenon as a local and domestic issue. At the time of Youth Radio's coverage, child sex trafficking in Oakland was starting to attract mainstream media attention, including features on local news sites and the national cable network, CNN. But across news coverage, too often girls who'd been recruited or, more often, coerced into the sex trade as children—sometimes by boyfriends, sometimes after being kidnapped and then forced to work the streets—were talked about rather than given an opportunity to share their stories. «To solve a problem, you have to understand it», is how one girl who'd been forced into trafficking at age 15 put it, «so to solve this prostitution problem, you have to understand the girls». That was Youth Radio's starting-point for the story—partnering with girls who'd been trafficked as co-producers of the story.

«I'd wake up at 5, I'd be outside by 5:30», said a girl with the pseudonym Brittney, who was interviewed for the story by Youth Radio's lead reporter, Denise Tejada. «I would just wait to see what happened», Brittney went on, «Whether it'd be in the streets or whether I'd be on the Internet. And then I won't be able to come back inside until like 2 o'clock in the morning, so I'd get only, like, three hours of rest». Many girls who were being sold on Oakland streets were still in high school.

For one part of the story, reporter Denise Tejada and a Youth Radio producer went to International Boulevard in Oakland to capture the scene there, an area widely known as «The Track». Here's the except as it ran on NPR.

Denise: «It's around 6:10 and we're driving down International. And these are girls that look so much younger than I am, and I'm only 21. In a 50 block span, I count 20 girls. Some are posted on street corners. Others are hanging by bus stops, or just walking the same blocks over and over.

I park at one of the many taco trucks on International Boulevard. The guys who work the truck say that everyday, pimps use their parking lot to drop off their girls and hang out. They say it's common to see a girl being beaten by her pimp. Basically pimps run their businesses from this spot.

Just in a matter of seconds, there's a girl getting picked up by a guy, or a john. From my car, I spot two women. One seems to be the leader, or what people in the game call a «bottom girl». She approaches the car, speaks to the driver, and instructs the younger girl to walk over… It's a Toyota Prius, and they're waiting for a girl to get into the car. She has tight leggings, gray shirt, just carrying her heels. She looks like she could be 17 or something and they just left right now.

While most Oakland residents drive by and don't think twice about what's going on here, the people in this neighborhood do. People like 20-year-old Frank Pardo, whose mother owns Yogi's Bridal Shop. Pardo grew up here».

Pardo: «They're always there, you always see them, and some of them are quite beautiful too. Looking like straight models. They've been here for all these years. What makes you think they're going anywhere? Police see em. I mean, everyone sees them. Nobody does anything».

In telling this story, Youth Radio aimed to «do something» by revealing the realities of child sex trafficking as they relate to flawed laws and commercial infrastructures (websites, photo studios, marketing consultancies) that have sprung up to promote underage girls' online profiles. In gathering interviews for the story, Youth Radio producers and researchers took great care in approaching community-based advocacy organizations that work with girls who'd been trafficked. As a youth-serving institution, the newsroom sought to differentiate itself from other media organizations that were known to dig for the most sensationalized personal narratives and not always protect girls' identities. This level of care translated into the details of the scripting itself, especially how girls, and Oakland itself, were described in passages like the one excerpted above. Though the word prostitute does appear a couple of places in the story, Denise and her colleagues heeded a point made by a local advocate who'd been trafficked as a child and went on to help girls move out of that life. «Every act of what's called quote unquote 'prostitution' with these children is actually a form of child sexual abuse», said Nola Brantley in the story, «and to take it further, child rape. So no, I don't think children who are raped should be criminalized».

And yet, a key finding in Youth Radio's reporting was that that's precisely what law enforcement policies do, when officers arrest girls and send them into juvenile detention, while lacking the necessary resources to carry out the much more costly and demanding police work required to prosecute traffickers and johns.

3.1. Investigating the Digital Afterlife

In addition to broadcasting «Trafficked» in two parts on National Public Radio on December 6th and

7th, 2010, Youth Radio published interviews, documents, and links to relevant resources on its own website (Youth Radio, 2010a), on NPR's website (Youth Radio, 2010b; 2010c), and on the massively popular «Huffington Post» (Youth Radio, 2010d; 2010e). It was through those venues that a digital afterlife for the story began to take shape. Comments accumulated: more than 300 were posted on «The Huffington Post». The story was shared through Facebook more than 4000 times, and Twitter streams filled with tiny urls linking users to the coverage, including Tweets from journalists and advocates working on issues related to child welfare. The story showed up on college class syllabi almost right away, in departments of sociology and education.

Striking in the afterlife was the extent to which the very same issues that manifested in the pre-production phase of developing the story surfaced again and again, refracted through the voices of varied users with interests of their own. Never far from the surface on some sites were debates about the legalization of prostitution, and then came reminders of the story's focus on children, for whom legalization would not apply. Here's one excerpt from one site's comment stream:

«A friend in college helped pay her bills by being a high class call girl. Another friend of a friend moved to New York and did it til she got married to a German. I don't recommend it, but it does happen».

«What's that got to do with child sex trafficking? This article is not about «prostitution» it's about slavery and rape of minors».

«Those who are (predictably) calling for legalization of prostitution need to pause their fingers above the keyboard before hitting «send» long enough to realize that this article is about underaged girls… being forced into the sex trade. Legalizing prostitution for adult women will do nothing to address this issue…».

Also striking in the story's afterlife was the way in which the content traveled. On its website and «The Huffington Post», Youth Radio editors published materials that were not part of the radio story, including interviews with three high school girls who were still actively working Oakland's track, and a document procured from the local district attorney's office called «pimp business plan». In that document, one trafficker outlined in hand-written notes precisely how he planned to move from «the concrete streets to the executive suites» by expanding his commercial sexual exploitation of girls.

The Youth Radio editorial team was well aware that the pimp business plan was just the kind of document that can sometimes «go viral». And it did. First, it was published by the website Boing Boing (5 million monthy readers), an editor of which has been a longstanding Youth Radio partner. Beyond that contextualized post, the plan moved to a very different kind of website: one known to analyze business models and other news emanating from start-up companies in Silicon Valley, hot bed to US dot-com entrepreneurship. On that site, running under the headline, «Pimp Proves Rhyming Doesn't and Won't Ever Help Your Business Plan», a typed-out version of the plan appeared, accompanied by an unattributed photo of an African American man talking on a cell phone wearing an oversized crown with huge gems, sparkling sunglasses, and a humongous silver pinky ring. «The 15-odd step plan is funny», wrote the post's author, «and we don't want to take away from the enjoyment of reading a rhyming business plan, but there is a serious undertone here. The business plan was designed to re-model the way the pimp markets underage girls for sex». She went on to briefly enumerate the elements of the plan and then conclude, «as far as business plans go, we probably don't need to tell any of you that it's terrible. Had the pimp only typed 'business plan' into wikipedia, he could have written a better one using their basic outline… Assuming that the fact his plan is now all over the internet means he's no longer a pimp, the plan is proof that rhyming might help you remember your business plan - but it won't help you if you leave off the most important plan for the future which, in the case of illegal activity, is of course, don't get caught» (Comstock, 2010).

As the pimp business plan migrated, it drew the story into online conversations whose tone, content, and community were quite a distance from the Youth Radio newsroom's intent for the reporting. Part of navigating a story's digital afterlife involves complex risk calculations, about how to release provocative content that has the potential to deliver a substantive message to wider and wider audiences, knowing that content can move and re-circulate as a decontextualized unit, and that there's always the possibility it will re-appear in problematic forms.

How can media literacy prepare young people for cases like this one, where they program content for users beyond publication? If it were ever appropriate to refer to a story like «Trafficked youth media», it becomes highly questionable to affix that label to the story once it takes on a digital afterlife of its own. I mean to take nothing away from the role of young people leading the research and reporting. Rather, I want to highlight the extent to which the story gets reproduced, again and again, by adult institutions with

their own histories, agendas, active users, and political economies.

3.2. Managing Digital Content

Rushkoff calls for a codification of the changes we're undergoing, «their social, cognitive, and intellectual implications», in this still-emerging digital era (2010b: 19). Young people are developing new codes of conduct as they create models for sustaining production beyond publication. Digital media literacy in this context requires tracking and shaping the way your content is recontextualized by others, who have the power to take it in new directions, and apply it to different communities and uses.

That doesn't mean jumping into comment streams and protesting every time you read something from a user with which you disagree. But it does require having a network of collaborators who can help guide your decision about when, in fact, it does make sense to intervene when the afterlife of a story takes an unexpected turn, and how to do so effectively. Literacy, in this sense, means knowing your users, trusting your users, and also pushing back against your users when that move is called for. Skills and habits that take on especial urgency include:

• Discovery: While the capacity to produce high-quality original content remains a prime media literacy goal, equally important for emerging media makers is knowing how to find, filter, arrange, and display existing content that will help tell your story in a full and nuanced way. In this sense the author is always already a user of other people's media first, and an aggregator and assembler of materials that can support and amplify the story you want to tell.

Analytics: To track how a story like «Trafficked» is being actively consumed and used, young people need to know how to access, understand, and act on analytics – meaning compilations of data that reveal how content is being consumed. It is no longer enough simply to deliver a story to an outlet and then report out audience «cumes» (which is the metric distributors have traditionally used to calculate their total number of unique listeners). To know their users, authors

need to understand what parts of a story users click on, how long they stayed, what users' points of entry were into the piece, where they went when they left, and what platforms they used to share the story with friends. These are data available through free, back-end systems that visualize displays using pie-charts and graphs and statistical presentations. Without knowledge of these systems, young people can only guess at how their content is being consumed and used.

• Network Mobilization: It is one thing, as an individual author, to respond to a reader's problematic or erroneous comment on one's own. It's another thing entirely when an author can deploy a network of con-

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nected users to get a story back on track, if that action is called for in its digital afterlife. At Youth Radio, we've seen examples of young people posting Facebook status updates to their thousands of friends inviting them to write into comment streams on sites where the authors are being personally attacked. In other cases Youth Radio's own social media networks can be mobilized to sustain interest and focus on a given story's key themes or discoveries. In this sense building an engaged community of friends or followers is not simply a matter of «playing the social media game». It is a crucial step in developing a powerful position in the digital afterlife (Ito & al., 2010).

• Platforms: Finally, in this article, I have focused on young people producing content. We can see in a story like «Trafficked», and in recent political uprisings around the globe, full-blown digital media literacy entails not only knowing how to tell stories, but also how to program platforms. That is precisely the

newest body of work Youth Radio is undertaking through its Mobile Action Lab, where young people partner with professional developers to design and build mobile apps that serve community needs. They program to users in both a literal and metaphorical sense, learning to create new technology tools, which increasingly determine who knows what, how information flows, and what makes change possible.

4. Conclusion

Lest this work of programming feel like a huge leap from what media literacy knows best –original, high-quality narrative production– I will end on an observation from an 18-year-old participant in Youth Radio's Mobile Action Lab. He has contributed to reporting projects not unlike «Trafficked», and is now part of a team programming apps. He describes how the team has used open-source software to design and test apps and get acquainted with the development process. «First you envision what you want a specific part of the app to do, then you attempt to add the functionality, and then you make any adjustments you find necessary after testing it out. Coming from a background in journalism, I have had ample practice with this process of creating and editing… Reading through the coding blocks was like meticulously scanning a paragraph for errors and incompatibilities».

As this young man says, whether they are creating content, or programming platforms, young people who undertake this kind of meticulous production work are constantly envisioning not simply what a story will look or sound or read like, but what it will do. These young producers are developing digital materials that travel and transform, and in the process, they are forming new codes of conduct and modes of literacy for the digital age. They need supportive peers, professional colleagues, nimble institutions, and expansive learning theories to do that work well. And then we, collectively, will be able to use their efforts to tell a new story about what media education can do.

References

COMSTOCK, C. (2010). *Pimp Proves Rhyming Doesn't and Won't Ever Help Your Business plan. Business Insider.* (www.businessin-sider.com/pimps-business-plan-2010-12) (06-24-2011).

DIMITRIADIS, G. & WEIS, L. (2006). *Multi-sited Ethnographic Approaches in Urban Education Today.* In KINCHELO, J. (Ed.). *The Praeger Handbook of Urban Education.* Santa Barbara, CA: Greenwood Press; 451-460.

GUPTA, A. & FERGUSON, J. (1997). Discipline and Practice: «The Field» as Site, Method, and Location in Anthropology. In GUPTA, A. & FERGUSON, J. (Eds.). *Anthropological Locations: Boundaries and Grounds of a Field Science.* Berkeley: University of California Press; 1-46.

ITO, M.; BAUMER, S.; BITTANTI, M.; BOYD, D.; HERR-STEPHENSON, B.; HORST, H.; LANGE, P.; MAHENDRAN, D.; MARTINEZ, K.; PASCOE, C.; PERKEL, D.; ROBINSON, L.; SIMS, C. & TRIPP, L. (2010). *Hanging Out, Messing around, Geeking Out: Kids Living and Learning with New Media.* Cambridge: MIT Press.

JENKINS, H. (2006). *Convergence Culture: Where Old and New Media Collide.* New York: New York University Press.

MARCUS, G. (1998). *Ethnography through Thick and Thin.* Princeton: Princeton University Press.

MINKLER, M. & WALLERSTEIN, N. (2003). *Community-based Participatory Research for Health.* San Francisco: Jossey-Bass.

MORRELL, E. (2004). *Becoming Critical Researchers: Literacy and Empowerment for Urban Youth.* New York: Peter Lang.

RUSHKOFF, D. (2010a). *Program or be Programmed. Address to the South By Southwest Interactive Festival. Program or Be Programmed.* (http://programorbeprogrammed.com/post/640214738/-douglas-rushkoff-sxsw-2010-program-or-be) (06-24-2011).

RUSHKOFF, D. (2010b). *Program or be Programmed: Ten Commandments for a Digital age.* OR Books.

TORRE, M. & FINE, M. (2006). Researching and Resisting: Democratic Policy Research by and for Youth. In GINWRIGHT, S.; NOGUERA, P. & CAMMAROTA, J. (Eds.). *Beyond Resistance! Youth Activism and Community Change.* New York: Routledge; 269-286.

YOUTH RADIO (2010a). *Trafficked: A Youth Radio Investigation. Youth Radio.* (www.youthradio.org/trafficked) (06-24-2011).

YOUTH RADIO (2010b). *Trafficked: Teenage Girls Describe Life in «The Game». National Public Radio.* (www.npr.org/2010/12/06/-131757019/youth-radio-trafficked-teen-girls-describe-life-in-the-game) (06-24-2011).

YOUTH RADIO (2010c). *Arresting Youth in Sex Trafficking Raises Debate. National Public Radio.* (www.npr.org/2010/12/07-/131757175/arresting-youth-in-sex-trafficking-raises-debate) (06-21-2011).

YOUTH RADIO (2010d). *Trafficked: A Youth Radio Investigation, Part 1. The Huffington Post.* (www.huffingtonpost.com/youth-radio-youth-media-international/trafficked-a-youth-radio_b_792595.-html) (06-24-2011).

YOUTH RADIO (2010e). *Trafficked: A Youth Radio Investigation, Part 2. The Huffington Post.* (www.huffingtonpost.com/youth-radio-youth-media-international/trafficked-ayouthradio_b_793-338.html) (06-24-2011).

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Training Graduate Students as Young Researchers to Study Families' Use of Media

Educar a jóvenes investigadores para el estudio del uso de los medios en las familias

ABSTRACT

This article presents a research and teaching experience that took place within an international research project, Digital Inclusion and Participation (2009-2011) involving researchers from Portugal and the USA (Texas). The main aim of the project is to understand the conditions and tendencies of access and appropriation of digital media by users and non-users, with a particular focus on families and groups which are more vulnerable to digital exclusion (elderly people, immigrants, ethnic and linguistic minorities). Together with this aim the project also includes advanced education in digital media, focusing on the training of graduate students through supervised research among those social groups. These two objectives came together in an interdisciplinary Seminar on Methods of Researching Media. This article focuses on the process of research and teaching that was activated in the Seminar, how graduate students were prepared and supervised to conduct interviews with two members of the same family from different generations, how they were actively involved in the adaptation of the original questions, used at the University of Texas in Austin, into a narrative script focused on life stories and relationships with the media (see Annex), and in the sampling process of the interviewee families. The implications of using such a qualitative methodology and research-based learning for the students, as well as the other advantages and pitfalls found during this process, are discussed in detail.

ABSTRACT (Spanish)

En este artículo se presenta una experiencia de investigación y formación en el contexto del proyecto internacional de investigación «Digital Inclusion and Participation» (2009-11), en el que participaron investigadores y expertos de Portugal y Estados Unidos (Texas). El objetivo principal del proyecto es analizar las condiciones y tendencias en el acceso y la distribución de los medios digitales en manos de usuarios y no usuarios, con especial atención hacia las familias y grupos más vulnerables a la exclusión digital (mayores, inmigrantes, minorías étnicas y lingüísticas). Además de este objetivo, profundiza en la educación en el ámbito de los medios digitales y en la formación de estudiantes de posgrado a través de un estudio supervisado de estos grupos sociales. Estos dos objetivos confluyeron en un Seminario Interdisciplinar de Métodos de Investigación en Medios (2009-10 y 2010-11). Este artículo incluye el proceso de investigación y formación que se puso en práctica en el seminario. Se centra en la preparación y supervisión de los estudiantes, que realizaron entrevistas a miembros de familias de distintas generaciones y participaron en la adaptación de las preguntas usadas originalmente en la Universidad de Texas en Austin, creando un guión narrativo centrado en la trayectoria vital y relaciones con los medios (véase el anexo). También se contemplan los procesos de muestreo de las familias entrevistadas y se analizan las implicaciones que tiene en los estudiantes esta metodología cualitativa de aprendizaje basada en la investigación, así como otras ventajas y deficiencias del proceso.

KEYWORDS

Research, teaching, learning, qualitative research, life stories, digital media, digital inclusion.
Investigación, formación, aprendizaje, estudio cualitativo, trayectoria de vida, medios digitales, inclusión digital.

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1. Introduction

In the summer of 2008, when the Digital Inclusion and Participation Project was designed for submission to the UTAustin-Portugal Program (www.utaustin-portugal.org), the US partner Joseph Straubhaar, Professor of Global Media at the University of Texas in Austin, stressed the relevance of involving students, illustrating this by drawing on his own experience: for a decade he had activated the process of research and teaching with graduate and undergraduate students, involving them in supervised field work collecting life stories with the media among their own families, and in areas of rural Texas or poor neighborhoods in the city of Austin where Latin American families live. Besides their learning in Media Studies, students contacted with and gathered up different life experiences while contributing with their own individual efforts to a collection of life stories with the media among generations of families in a long-term view, therefore also developing a sense of belonging and participating in a strong research project.

For these reasons, the project proposal included advanced research and education in the digital media with a transnational and interdisciplinary perspective: «Educate and train young student researchers in research about digital media»; «Promote methodologies of participatory research»; «Generate educational resources». Approved by the UT Austin-Portugal Program, the project started in April 2009 and the first seminar for graduate students was held in September 2009.

This aim of advanced research and education was seen as a challenge and an opportunity by the three Portuguese universities that participated in the project: the University of Oporto, the University of Coimbra and the Faculty of Human and Social Sciences (FCSH)-New University of Lisbon. In the latter, where the authors lecture, students would not only benefit from the experience of participation in the data collection but also gain educational credits (ECTS) if they participated successfully in a specific seminar directly related to the project. In fact, the faculty Board approved the reformulation of an existing MA seminar on Media and Journalism Studies, «Methods of Researching Media and Journalism», in its aims, skills and content in accordance with the purposes of this research project.

In May-June 2009, some months before the beginning of the seminar, a public appeal through wall posters and the FCSH intranet went out to graduate students from different Human and Social Science courses. A certain level of interest from these «young researchers» was anticipated, but in the first year what little interest there was came only from students of Anthropology, while some Media and Journalism Studies students initially reacted negatively to the new orientation of the seminar. The research and teaching model was unusual and an innovative learning process for all was just beginning.

2. The research and teaching model

It has been stressed that awareness of the learning processes and identity development is particularly demanding in «knowledge societies» where students should not only be «engaged in the production of knowledge» but also «educated to cope with the risks and uncertainties generated by the advances of science» (Scott, quoted by Huet & al., 2009: 577).

How is this pedagogical model replacing traditional learning realities based on content transmission, in universities? International research evidence suggests that the interconnections between teaching and discipline-based investigation is not readily revealed in practice (Brew, 2006; Huet & al., 2009). While the Bologna Declaration in 1999 stressed the importance and the need to promote research both at graduate and postgraduate levels in the European educational landscape, and many academics do consider that Higher Education should be distinguished by interconnecting university teaching and research roles, a brief comparison of national scenarios shows that the application of this approach varies considerably (Healey, 2005: 184-5): in the USA, student integration in research projects as a way of promoting «greater opportunities for authentic, interdisciplinary and student-centered learning» was recommended by the Boyer Commission Report (1998) and other national institutions related to Science and Research; in New Zeeland, the necessity of linking research and teaching is incorporated in legislation; in the UK, some departments and universities claim that teaching and learning is «research-led»; in France, most scientific research occurs in special research institutes outside the universities. Recently in Portugal, research units and associated laboratories, mostly in universities, started offering research grants to undergraduate or graduate students involved in research projects (Huet & al., 2009).

The debate on the potential of students' ability to learn and problem-solve beyond their current knowledge level through guidance from and collaboration with an adult or group of more able peers, inspired by Vygotsky (1978), has been visible particularly in Education related to concepts such as constructivist learning, communities of practice or identity development (Hunter & al., 2006). Among other perspectives,

Baxter's constructivist-developmental pedagogy clearly emphasizes students' development of identity as part of their professional socialization process. Based on an «epistemological reflection» on young adult intellectual development, Baxter (2004) presents four intellectual categories, from simplistic to complex thinking: from «absolute knowing» (where students understand knowledge to be certain and view it as residing in an outside category) to «transitional knowing» (where students believe that some knowledge is less than absolute and focus on finding ways to search for the truth), then to «independent knowing» (where students believe that most knowledge is less than absolute) and lastly to «contextual knowing» (where knowledge is shaped by the context in which it is situated and its veracity is debated according to the context). According to the author, this move is a shift from an externally directed view of knowing to one that is internally oriented, promotes identity development as «self-authorship» (including learning through scientific inquiry) and is better supported by a constructivist-developmental pedagogy situating learning in students' experience (Baxter, 1999).

The narrative and the discussion of this «research and teaching» experience is the subject of the following sections of this article.

3. Preparing students for fieldwork

The first sessions of the seminar introduced the theoretical model of the project and provided the 23 students of this mixed group with the methodological approach for the qualitative fieldwork. In order to get students acquainted with theories that span from Media Studies to Sociology, together with basic theoretical guidelines, several discussions took place during these initial sessions. In fact, the theoretical framework of the project was based on several key concepts, which reflected distinct traditions and orientations in the field. Our approach attempted an integration of different interdisciplinary contributions ranging from the concept of media domestication (Silverstone, Hirsch & al., 1993) to theories of digital inclusion and exclusion (Selwyn, 2006; van Dijk, 2006), cultural and social capital (Bourdieu, 1984) and generations and families (Bertaux & Thompson, 1993; Bertaux, 1997).

Students received a basic knowledge of such theories in order to help them understand the project's aims as well as to provide guidance during the fieldwork. The latter was particularly emphasized in these initial sessions in the task of selecting the families to be interviewed, since the sampling procedure was to follow a purposive logic based on clear theoretical assumptions regarding fundamental characteristics to be included in the final sample.

As for the methodological approach, the initial sessions also explored epistemological as well as practical issues concerning qualitative methods (Bryman, 2004; Hammersley & Atkinson, 2000; May, 2001; Lobe & al., 2007; Silverman, 2009). On the one hand, we launched a broad methodological discussion regarding

> That awareness of the learning processes and identity development is particularly demanding in «knowledge societies» where students should not only be «engaged in the production of knowledge» but also «educated to cope with the risks and uncertainties generated by the advances of science»

the basis of the research approach, presenting students with an essential knowledge of its aims. On the other hand, we explained in detail the basic principles of the qualitative methodologies adopted and, at the same time, made an effort to involve students in building instruments tailored to the specific aims of the research.

Students' interest in the research project gradually increased in these first sessions. They were interested but the sessions were not very different from the classic expository lecture. Two factors contributed to the turning-point and much more active involvement: 1) the elaboration of the interview script; and 2) student responsibility in finding the families needed for the purposive sampling.

In producing the script, the guide used by our US colleagues for the qualitative interview organized around direct questions on topics was reformulated into a new and more narrative type of script, facilitating a more conversational approach between interviewers and interviewees; this had already been used in similar research with families (e.g. Clark, 2009).

The new script consisted of three parts: life course; personal history with media; and current media uses (See Annex 1). While most of the questions were factual and relatively easy to answer, others activated judgments and evaluations on attitudes, beliefs and changes in the dynamics of the family (what do you think differentiates your family from others? and, what do you think makes your family similar to others?), or on personal course and family influence (Do you think that being male/female affected your life? In what ways?).

Students greatly appreciated being involved in this process of reformulating the original guidelines. After small changes discussed collectively, we proposed a role-play where one student acted as interviewer and another as interviewee, answering according to

engagement and our guidance, and the following sessions on sampling the families would confirm this outcome. As already stated, the sampling design was purposive, focusing on specific characteristics which included: families that used the public access Internet; rural and urban families; families with children under 18 and those who do not; families involved in community outreach programs; immigrant and non-immigrant families; families that didn't send their children to university. In both countries, Portugal and the US, the researchers were to monitor the selection closely, in order to make sure that the final sample was not unbalanced by gender, social class and level of education, which ultimately functioned as control variables.

Students took very seriously their responsibility for finding two families that fit the criteria. In the session dedicated to sampling, the blackboard soon became full of family indicators that complied with the design demands mentioned above, while the negotiation and cooperation that emerged among them ensured equilibrium. Another factor was that enlisting their own families or families through friends or persons already known to them in their everyday lives (such as the coffee-shop employee or the doorman) meant they did not have to face complete strangers. As they wrote in their essays:

> The levels of embeddedness and domestication of the communicative devices, such as mobile phones, computers or game consoles, depend on the moment when and how these were introduced into the household: for instance, the interviewees who stated they had long been connected to the Internet had greater technology know-how while they also expressed a lower level of enthusiasm for its potential uses. On the other hand, the interviewees who have used the Internet for less time are still in an initial phase of appropriation and assimilation of its potential uses, where the levels of novelty and excitement are still considerable.

— «The choice of the two families was essentially based on the direct knowledge of the youngest members that would be interviewed, since these

his/her own experience and life story. In spite of their apparent familiarity with the questions, being directly asked about their experience stimulated a different approach, an «objective look at the self» (Blumer, 1969: 70). The role-play and the subsequent analysis of the performances of interviewer/interviewee contributed to student self-awareness and to a greater enthusiasm towards the research topic, as if they had at last accepted the project. Being questioned about sensitive issues stimulated reflective thinking: «Oh, I just realized that I had never thought about this before…».

This role-play dynamic helped students to displace from the periphery to the center through their mutual

seem to be good examples of families within the threshold of exclusion. In both cases we were facing parents that had just four years of schooling and were all but excluded from the digital media» (Pedro).

— «I selected families that were part of my social network, whose life trajectory I was already aware of, but whose relationship with the media I knew very little about, particularly the digital media. Viewing my colleagues' choices of subject (a procedure discussed in the class), migrant families seemed to be over-represented and Portuguese families under-represented, thus leading me to choose two Portuguese families» (Inês).

Interviewing her own family members allowed

Catarina to get a better understanding of their own personal life stories and the impact on their usage of the media, as she concludes: «Although they were my family members, I wasn´t aware of certain childhood experiences, particularly of Maria [grand-mother], António [uncle] and Paula [mother]. It became clear that gender greatly influenced the life trajectory of each one».

4. Fieldwork and assessment

The fieldwork took place in December 2009, just before Christmas. Students were instructed on distinct relevant procedures, such as the importance of obtaining written informed consent from interviewees to participate in the study; the necessity of recording the whole interview to avoid missing any relevant details; the meaning of conducting the interview as far as possible in the form of a natural conversation, following the interview script as a general orientation guide; and on gathering information regarding the household when possible, noting what was visible in the «domestication» (Silverstone, Hirsch & al., 1993) of the media.

In fact, most of the interviews took place in peoples' homes, in living rooms but also in kitchens and in young people's bedrooms, allowing interviewers to capture the «appropriation» of the media by the householders, the places and positions they occupied.

— «In Carla's house, which is also a flat, one can see a lot of electronic devices, namely the television set, the radio, the DVD player and the computer, all in the same room. The practice of using the television for companionship was obvious when her first gesture was to switch it on, even with visitors present» (Ana).

«Besides the laptop, one can find in the living room lots of devices that show the need for contact with the media: two radios, a large TV set, a DVD player, a camera tripod, a digital photo frame, earphones, about five remote controls and other devices that I couldn't identify, all laid out near the main armchair, so all could be reached with minimum effort» (Mariana).

Students were also instructed on the transcription procedures (literal transcription of questions and answers, introduction of silences, pauses, laughs…). Every student was to transcript and send part three of the interviews, referring to Internet and computer use, to all group members, therefore enabling collective discussions on the answers concerning these themes in the final sessions of the seminar.

The final essay (around 4,000 words) should analyse the research process and, based on the data collected, highlight similarities and differences in the families interviewed. In order to do so, students were asked to explore the «narratives-in-interaction» (Blaumberg, 2004, in Clark, 2009), a method of analysis where the researcher «should pay attention not only to what is said but also to what is not said, and why certain statements might have been made in a particular context to elicit a desired response among a specific audience», a way of reading how the interviewees «are managing their social identities in context» (Clark, 2009: 391).

Students had to copy the interviews onto CD for transcription in their entirety by the project research assistant. This yielded a collection of 92 interviews from 46 families, a considerable portion of the 130 individual life stories gathered from 65 families by students at the three Portuguese universities.

Besides the full transcriptions that provided a comprehensive corpus of discourses concerning life trajectories, childhood memories with (or without) the media and current media interests and uses by their interviewees, these essays also contain interesting notes on the domestication process and on the media culture at home. Precisely due to the fact that the interviews occurred at home, in some cases other members of the family added contributions that revealed the digital gaps in the households.

Among the diversity of angles provided by the interviews, gender gaps emerged as one of the most visible to the young researchers: women from different social and educational backgrounds tended to be less involved in the digital technologies at home, as illustrated in the following transcripts:

— «Both of the mothers interviewed [43 and 46 years old, both working class, educated to primary school level and non-Internet users] consider that it is normal that they don't use technological devices because they have almost no schooling. The lack of literacy and growing up in a context where these issues were not familiar make the family vulnerable to feelings of apprehension. In both cases it was obvious that fear of the Internet resulted from what «one hears around» (Pedro).

— «In the taped interview and in the offline moments, it was visible that Teresa's [64, middle class, incomplete secondary school education and non-user] husband and son had already stimulated her to have more consistent contact with the internet. Upon repeating that she 'would like to know more', she would like 'to use the Internet and the computer more', her husband said with an impatient look on his face: 'It is over there! Go on!' provoking an enormous laugh from Teresa and her son. It was obvious that the interviewee is the one who excludes herself from the digital media» (Ana).

In this latter case, the presence of other members of the family during the interview, previously discussed as problematic, indirectly provided a different picture of Teresa's digital exclusion, contrasting her «politically correct» answers with her everyday refusal to access the computer. Other unexpected situations in the households enriched the landscape of family life with different media. For instance, in a formal interview with her husband and son in which she did not take part, Paula (53) clearly reveals the media divide in that middle-class household:

— «Paula is the only member of the family who doesn´t identify herself with electronic devices. She states that she is no good at using these «trendy gadgets» and expresses regret at the family's digital inclusion: «those little gadgets stole my husband and child. They don´t pay attention to anything else, sometimes I have nobody to talk to, because Armando (73) is glued to the TV or to the computer, and let's not even mention Diogo». Paula's hobbies are cooking and looking after her grandchildren» (Mariana).

Among other adults, the lack of literacy was noticeable in the ways some occasional users with low levels of schooling expressed their online experience, as noted:

— «It is clear in David's [53, primary school education only] speech that there is a lack of linguistic skills when using exact terms: 'I know how to look up this and that but I don't know how to explain it in technical words…I have some difficulty in explaining it, yes. Using it is easy, but to explain it…» (Inês).

Other conclusions emerged from the comparison between families' appropriation of the technologies, showing how factors such as experience and routine have an impact on them:

— «The levels of embeddedness and domestication of the communicative devices, such as mobile phones, computers or game consoles, depend on the moment when and how these were introduced into the household: for instance, the interviewees who stated they had long been connected to the Internet had greater technology know-how while they also expressed a lower level of enthusiasm for its potential uses. On the other hand, the interviewees who have used the Internet for less time are still in an initial phase of appropriation and assimilation of its potential uses, where the levels of novelty and excitement are still considerable» (Marisa).

5. Lessons from the process: advantages and pitfalls

From a data collection point of view, this research and teaching program enabled us to gather an impressive amount of life stories and experiences with the media. As in other data collections that rely heavily on work by inexperienced students quality varies: some interviewers were too dependent on the interview script and didn't ask obvious follow-up questions, while others did exactly the opposite and obtained vivid descriptions of family life stories and experiences with different media.

The fact that the interviews took place in the interviewees' homes enabled students to capture the household atmosphere, thus recording feelings and evaluations from other members of the family beside the interviewees – for instance, the fact that most women are excluded from the technological world within their households and the feelings of exclusion they bear.

The majority of the essays produced by the students show self-reflection and critical evaluation of their data; in fact, some of them were extremely reflective and well-sustained theoretically, thus indicating a clear integration of the methodological guidelines and the theoretical frameworks. Besides the educational credits and a reference in their résumés, this participation provided students with important methodological training as well as experience for their own research activities.

Epistemologically supported, they had a chance to not only incorporate external knowledge but also build «contextual knowing» of the digital media in the lives of families, how they are diversely appropriated by age, gender, level of education, and of the particularities of a person's life story; they had the opportunity to read and understand practices and discourses of adhesion, resistance or refusal as well as to identify related constraints, such as a low level of literacy. In sum, they were involved in active processes of construction and reconstruction of knowledge throughout our guidance and collaboration/cooperation with their peers. Quoting Ana: «This kind of academic study makes us reflect on identity issues while it also provides us with an excellent exercise for self-reflection. This was an enriching experience not only in the fieldwork but also in the perspective outlook of issues related to the digital integration in our society».

The pitfalls of this experience may be interpreted differently according to the students' perspective or that of teachers/research supervisors. In the former, some frustration may arise from not having appropriate previous experience and the consequent difficulties related to that fact. Also, the amount of time available in the seminar for discussing different methodologies might not have been enough for some students, especially bearing in mind that they came from a range of

academic backgrounds. In the latter case, we might feel some frustration of our own, considering our high hopes and that the work produced did not always meet those standards. Difficulties also arise from the fact that the time available for training was not as long as it should have been, and because not all students showed the same interest and had the skills to perform the tasks assigned to them. Contrary to our expectations, there was no rush by graduate students to sign up for this experience when it was first announced but we did not explore why.

Overall, our assessment of this training experience is highly positive given that all the problems that arose during the fieldwork were solved, and that the quality of the materials gathered is quite good. In addition, from a pedagogical point of view the continuous exchange of ideas proved to be useful, and not to mention that we also learnt from unexpected situations as well as it being a rewarding experience for us as lecturers and researchers.

References

BAXTER, M. (1999). *Creating Contexts for Learning and Self-authorship: Constructive Developmental Pedagogy*. Nashville: TN: Vanderbilt University Press.

BAXTER, M. (2004). Evolution of a Constructivist Conceptualization of Epistemological Reflection. *Education Psychologist, 39 (1)*; 31-42.

BERTAUX, D. (1997). *Les récits de vie*. Paris: Nathan.

BERTAUX, D. & THOMPSON, P. (1993). *Between Generations*. London: Transaction Books.

BLUMER, H. (1969). Symbolic Interactionism. In: CALHOUN, C.; GERTEIS, J. & AL. (2002). *Contemporary Sociological Theory*. London: Balckwell Publishing; 66-77.

BOURDIEU, P. (1984). *Questions de Sociologie*. Paris: Les Editions du Minuit.

BOYER COMMISSION REPORT (1998) (http://naples.cc.sunysb.edu/-pres/boyer.nsf/webform/contents).

BREW, A. (2006). *Researching and Teaching: Beyond the Divide*. London: Palgrave Macmillan.

BRYMAN, A. (2001). *Social Research Methods*. Oxford University Press.

CLARK, L.S. (2009). Digital Media and the Generation Gap. *Information, Communication & Society 12 (3)*; 388-407.

HAMMERSLEY, M. & ATKINSON, P. (2000). *Ethnography. Principles in Practice*. London & New York: Routledge.

HEALEY, M. (2005). Linking Research and Teaching to Benefit Student Learning. *Journal of Geography in Higher Education 29 (2)*; 183-201.

HUET, I.; BAPTISTA, A.V. & AL. (2009). Evaluation of Undergraduate Students' Involvement in Research Projects. *The International Journal of Learning, 16 (9)*. (www.Learning-Journal.com).

HUNTER, A.B.; LAURSEN, S. & AL. (2006). Becoming a Scientist: the Role of Undergraduate Research in Students' Cognitive, Personal and Professional Development. *Wiley InterScience, Inc. Sci Ed, 91*; 36-74. (www.interscience.wiley.com).

LOBE, B.; LIVINGSTONE, S. & AL. (2007). Researching Children's Experiences on the Internet across Countries: Issues and Problems in Methodology. LSE: EU Kids Online. (www.eukidsonline.net).

MAY, T. (2001). *Social Research. Issues, Methods and Process*. Milton Keynes: Open University Press.

SELWYN, N. (2006). Digital Division or Digital Decision? A Study of Non-users and Low-users of Computers. *Poetics, 34*; 273-292.

Silverman, D. (2009). *Interpreting Qualitative Data*. London: Sage.

SILVERSTONE, R.; HIRSCH, E. & AL. (1993). *Tecnologías de la información y de la comunicación y la economía moral de la familia. Los efectos de la nueva comunicación. El consumo de la moderna tecnología en el hogar y en la familia*. Barcelona: Bosch; 39-57.

VAN DIJK, J. (2006). Digital Divide Research, Achievements and Shortcomings. *Poetics, 34*; 221-235.

VYGOTSKY, L. (1987). *Mind in Society*. Cambridge, MA: Harvard University Press.

Annex 1
Project Digital Inclusion and Participation (UTAustin|Portugal/CD/0016/2008)

Interview guide on Life Story and the Media

NB: The question order does not really matter. Once a topic or a main question is introduced, the remaining questions should be used only with the aim of initiating a missing answer or specifying incomplete information.

PART ONE

1. Origin and family characterization
   Let's start by talking about you and your family…
• Could you tell me about the place where you were born? What memories do you have? How was your childhood?
• Is your family from that region? Tell me a bit about the place where your family is originally from (where were your parents born? And your grandparents?)
• And what about the rest of your family? Do you have any brothers or sisters? (Ask if they were born in the same area/region/country). Are they older or younger?
• Do you have children? Where were they born?
• Nowadays, do you live with any family members?
NB: Information on the place where the family is from should be entered in the genogram.

2. Family mobility
   Tell me about where you live… (city/town/village)
• How many years have you lived here?
• How long have you lived here? And your family?
• Where did you/they live?
• Where did you prefer to live?
• (If the person has moved from another place) – Why did you move here?
• (If the person has moved from another country) – Did you have difficulties (or your family) in moving to Portugal?

3. Occupation and schooling of the family members: personal course and family influence
• Tell me more about your job and your schooling history… and what do the rest of the family members do?
• What are your school qualifications? When did you stop studying?
• What is your parents' level of education? And your grandparents?
• Are you happy with your level of education? Would you have liked to have studied longer?
• Did your family give a lot of or little importance to school?
• Does your current job correspond to what you imagined when you were a child/or younger?
• How did you come to have this current job? Did you have any other jobs?
• Did anyone in your family influence your professional choices?
• What are/were your parents' professions?
• And what about your grandparents?
• And in reference to your schooling, was there anyone in your family that influenced your choices? Who?
• Looking back at your life, was there anything important that you learned from your family?
• Do you think that being male/female affected your life path? In what way?
   NB: Information on the family's employment and schooling should be entered in the genogram.

4. Practices and personal and family experiences
   Tell me about your daily life…
• Could you describe a typical day, for instance, yesterday?
• What do you do when you have a day off, for example Saturday or Sunday?
• When you were a child, what type of parties did your family usually have? For what occasions did your family get together and celebrate?
• And nowadays, has anything changed? Could you kindly describe a typical family party?
• (If he/she came from a foreign country) What was your life like in your country? How did you spend a typical day there?
• (In the case of being a parent) In what ways are your parents/children/grandchildren different from you?
• What do you think differentiates your family from other families? And what do you think makes your family similar to other families?
   Essential topics that should be covered in the 1st part of the interview:
   — Migration, travel, history
   — Education and family history
   — Work/Socio-economic status and history
   — Ethnicity, traditions and family inheritance, identity and social networks.

PART TWO

1. Personal history with the media

Let's talk about your free time when you were a child or a young person… and also nowadays.

• When you were a child, what were your favorite activities, how did you entertain yourself? And later on, in your adolescence/youth?
• When you were a child/adolescent what did you usually read? Why?
• In reference to TV, which programs did you watch normally? Why?
• And in reference to the radio, what did you usually listen to?
• Do you remember when your family got a radio/a TV set? Who brought it home? Who set it up at home?
• What other information and entertainment devices/equipment did you have at home when you were a child? (Radio, record player, tape recorder, video, gaming console, computer and so forth…).
• And nowadays, does your family have cable or satellite TV? When did they get it?
• (Other personal communication media). Do you have a cell phone? What type of mobile phone do you have? What are its characteristics? What kinds of activities do you use it for?
• Going back to your family, who was the first person to own a mobile phone?
• (If the interviewee is an immigrant) Do you use the mobile phone to contact your family and friends? What other media do you use to contact your family?
• Do you have a camera or a camcorder? What do you usually use it for? When you were a child, did your family also have any of these types of equipment?
• Do you usually listen to music? What kind of music do you prefer? How do you usually listen to it, what media do you use?
• Do you usually watch films? What kind of films? What media do you use for films?

2. Current media use

Tell me about the media you use today…
• What mass media (newspapers, magazines, radio, television…) do you usually use?
• Which mass media do you spend more time with? Why?
• What for? Do you use it for any special reason?
• What mass media do you use to keep yourself informed, to get the news?
• Why do you prefer this mass media over the others?
• For instance, which mass media did you use to follow the last electoral campaign?
• (Only for immigrants): What is the best way for you to follow events in your country?
• What mass media do you mainly use for entertainment?

PART THREE

1. Computer and internet use

Let´s talk about computer and internet use
• Does your family have a computer? How long have they had it? In your home, where is it?
• Who was the first person to bring a computer home?
• Do you have your own computer?
• What are the main uses of a computer for you?
• Does your family have access to the Internet at home? How long have they had it? Is it broadband?
• Where can you access the Internet at home?
• How often do you use the Internet? (if they access it in different places, ask about the most frequent)
• Do you usually use the Internet outside home? Where? How frequently do you use it?
• In general, what do you use the Internet for? Why?
• Do you use the Internet for different things in different places? (This question assumes the person speaks Portuguese; if this is not evident ask if the person uses the Internet in Portuguese). Besides Portuguese, do you use the Internet in any other language? Which?
• How did you learn to use the Internet? Were you helped by any family members? Who? Were you helped by a friend? Were you helped by a work colleague?
• Do you usually use the Internet with anybody else at home?
• And with your friends, do you normally use the Internet with them?
• Do you usually play videogames? How do you play (computer, gaming consoles and so on…). And what about the other family members?
• (For those who use the Internet outside the home). When you use the Internet outside the home, do you usually use it with anybody else?
• (For those who don't use the Internet). If you don't usually use the Internet, do you know where you can access it?
• Why haven´t you done it yet?
• If you haven´t used the Internet yet, do you have any idea what you could do with it?

2. Main topics to be covered
• Use of audiovisual media: radio, TV, cable or satellite
• Use of different news media, which ones are really used
• Use of interactive media: mobile phones, other mobile devices, computers, Internet
• Other languages used on the Internet apart from Portuguese
• What media and technologies are used for leisure: music, games, films…

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Keys to Recognizing the Levels of Critical Audiovisual Reading in Children

Claves para reconocer los niveles de lectura crítica audiovisual en el niño

ABSTRACT

Based on the results of several projects carried out with children and adolescents, we can state that knowledge of production and broadcasting aids the acquisition of critical media skills. This article combines three media education experiences in Venezuela, Colombia and Spain driven by a critical reception approach. It presents leading indicators for determining the level of critical audiovisual reading in children aged 8-12 extracted from intervention processes through workshops on media literacy. The groups had been instructed on the audiovisual universe, which allowed them to analyze, deconstruct and recreate audiovisual content. Firstly, this article refers to the evolving concept of media education. Secondly, the common experiences in the three countries are described, with special attention to the influence of indicators that gauge the level of critical reading. Finally, we reflect on the need for media education in the era of multi-literacy. It is unusual to find studies that reveal the keys to assessing the levels of critical consumption of digital media content in children, and this is essential for determining the level of children's understanding before and after training processes in media education.

ABSTRACT (Spanish)

Diversos estudios con niños y adolescentes han demostrado que a mayor conocimiento del mundo de la producción y transmisión de mensajes audiovisuales, mayor capacidad adquieren para formarse un criterio propio ante la pantalla. En este artículo se aúnan tres experiencias de educación mediática realizadas en Venezuela, Colombia y Spain, desde el enfoque de la recepción crítica. Se proporcionan los indicadores que llevan a determinar los niveles de lectura crítica audiovisual en niños de entre 8 y 12 años, construidos a partir de procesos de intervención mediante talleres de alfabetización mediática. Los grupos han sido instruidos acerca del universo audiovisual, dándoles a conocer cómo se gestan los contenidos audiovisuales y el modo de analizarlos, desestructurarlos y recrearlos. Primero, se hace referencia al concepto en evolución de educación mediática. Después, se describen las experiencias comunes en los tres países para luego incidir en los indicadores que permiten medir el nivel de lectura crítica. Por último, se reflexiona sobre la necesidad de la educación mediática en la era de la multialfabetización. No es muy frecuente encontrar estudios que revelen las claves para reconocer qué grado de criticidad tiene un niño cuando visiona los contenidos de los distintos medios digitales. Es un tema fundamental pues permite saber con qué nivel de comprensión cuenta y cuál adquiere después de un proceso de formación en educación mediática.

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1. Media education as an evolving concept. Main study aims

Recent history shows that media education started to emerge in the second half of the twentieth century. However, there already existed educational programs that had been produced in response to the effect that TV and films were having on children. At the beginning of the 1930s, some experts in USA began to draw attention to the need to integrate press and audiovisual resources into school curricula. In the following decades, these initiatives took root especially in the USA and Canada. Mario Kaplun introduced a new method of critical reading in the 1970s in South America, with the aim of highlighting ideological content in media messages. Other similar programs were implemented at that time in Chile, Uruguay and Paraguay, and the 1980s saw the emergence of educommunication in Argentina. In Mexico, Guillermo Orozco emphasized the role of the child as receptor.

In the 1990s in Spain, Jose Manuel Perez Tornero proposed a method for discovering the operations and processes of critical reading in TV. The definition of critical reading and analytical reading was introduced, with the difference being that critical reading refers to the capacity to «recognise the pragmatic purpose of the program, distinguishing the different thematic and narrative levels (...) and discovering co-textual and contextual connections, including alternative proposals, and giving a new meaning to the program». Analytical reading presents a deeper dimension, and requires a «global reading of the space [or audiovisual document], breaking this up into parts, capturing the different dimensions of the program, noticing the structure and making a global interpretation of the space» (Pérez Tornero, 1994: 150-152).

From the mid-1970s, some critical reception practices took place in TV and films in Venezuela. By the end of the 20th century, in an attempt to foster critical civic action, the Law for the Protection of Children and Adolescents (LOPNA) was passed, in which art. 69, entitled 'Critical education for the Media', states that «the State must guarantee education for children and adolescents with the aim of preparing and training them to receive, search for, use and choose the most appropriate information for their development». The urgency to include media education in educational programs and compulsory school subjects is outlined below. It also states that families must receive special training to critically analyze media content[1]. According to Martín-Barbero & Téllez (2008), new insights into old problems only properly emerged in Colombia in 1997 when children became the main focus for research activities into audience and the media (López De la Roche, 2000; Fernández, 1998; Rincón, 2002). After 2000, interest increased due to research funded by Colombia's National TV Commission. By that time, in Spain numerous publications and projects had already appeared that highlighted the importance of critical reading, and in 2008 the European Parliament defined media education as the «ability to understand and bring critical assessment to bear on the various aspects of media, being able to separate out information from the new media's flood of data and images»[2].

As media education researchers, we have organized various workshops with children and adolescents in different locations. The main aim has been to develop in them an understanding of production and audiovisual narrative from a critical viewpoint. We have carried out experimental investigations in several locations: in Venezuela in 1997, through the Telekids project in 1997, with the support of the Council for Scientific, Human and Technological Development of the Universidad de los Andes, which ran until 2000. This project also operated in Spain from 2005, where it was known as Taller Telekids[3] but it received no external funding. In Colombia, the same project started in 2006 with the support of a training program for critical reception (Mirando cómo miramos). In 2010, the third phase of this project was implemented at national level, supported by the Santiago de Cali University and the National TV Commission as part of the TV Development Plan[4].

2. Methodology

The sampling process in Colombia was conducted in public institutions and included 93 children and 58 adults, among them parents and teachers. In 2007, this model was expanded to 54 educational institutions in Cali, with 1,053 adults and 1,355. In 2010, the model was implemented with peer universities in six areas across the country, involving 2,400 children and 2,400 adults. In Venezuela and Spain the workshops began in 1997 with small group sessions, and the main goal of all these practices was to develop the critical awareness of children, parents and teachers in line with the aims of media education today.

The methodology applied in the three countries consisted of a pre- and post-test, so that the total sample (1,500 children aged 8-12) could be analysed before and after training. As a result, it is evident that a greater knowledge of audiovisual production enables a better development of skills to extract content structures and critically analyse them. In Venezuela and Spain, the assessment was performed according to the

following indicators: 'sufficiently critical', 'moderately critical' and 'uncritical'. A subject able to identify, describe and recognize characters, history, intention and the factors appearing in the first column in Table 2 would be categorized as 'sufficiently critical', which also includes the capacity to suggest changes in content. A subject who is not always able to identify the form or content in audiovisual documents and whose content changes are close to the original version would be considered 'moderately critical'. 'Uncritical' reflects the inability to critically examine programs. In Venezuela and Spain a teaching guide was published with the support of the Department of Innovation, Science and Business of the Regional Government of Andalusia, entitled 'Los secretos de la tele: Manual de alfabetización audiovisual para niños y maestros' (The secrets of TV: a literacy guide for teachers and children) (Sánchez-Carrero & Martínez, 2009), including an interactive CD for children. This guide is divided in six thematic areas: production, screenplay, camera, sound and lighting, digital editing and critical reading. Along with the production workshop, there were practical critical reading sessions consisting of viewing cartoons, TV series, films and adverts for critical analysis. The three indicators and their definitions appear in Table 1.

The intervention model in Colombia is pedagogically based on UNESCO's Four Pillars of Education for the 21st century: learning to know, learning to do, learning to live together and learning to be. Participants develop skills to approach content critically by learning-by-discovery, creating positive environments that improve their quality of life. The workshop is divided in three parts: first, a dialogue with participants, identification of their readings and relation to TV; second, the theory and practice of the concepts of audiovisual language and media production logic are presented; third, a reflection on elements and intention is proposed to draw attention to viewer

Sufficiently critical	Moderately critical	Uncritical
Identifies characters and their main characteristics	Identifies characters without detailing any characteristic	Inability to identify the characters
The story is retold in general terms told by the student omitting insignificant details	The story is retold including insignificant details.	Inability to retell the story, the student is confused.
Describes characters' behaviour	Gives vague description of characters' behaviour	Inability to describe characters' behaviour
Identifies solutions provided by the characters to overcome difficulties	Makes mistakes in the identification of solutions	Inability to identify solutions
Gives reasons that justify choice of favourite characters	Gives vague justification of choice of favourite characters	Gives no reasons to justify choice of favourite characters
Recognizes author's intention	Has a general idea of author's intention	Unable to identify author's intention
Suggests changes in the content	The changes suggested are close to the original	No changes in content suggested
Differentiates reality from fantasy	Hardly differentiates reality from fantasy	Unable to differentiate reality from fantasy

Table 1. Critical reading of cartoons.

Sufficiently critical	Moderately critical	Uncritical
The student retells the story in general terms, omitting insignificant details	The story is retold along with insignificant details.	Inability to retell the story, the student is confused.
Recognizes the final message in an episode	Has a faint notion of the final message in the episode	Inability to identify messages in any of the episodes
Identifies some of the shots, camera movements and their uses	Identifies some shots but not their intention	No shots or camera movements identified
Remembers the musical backdrop, sound effects and their uses	Remembers music or sound effects but does not indicate their intention	No recollection of music or sound effects
Recognizes scenography and indoor or outdoor settings	Recognizes scenography but cannot differentiate between indoor or outdoor settings	Inability to recognise scenography in the episode
Describes characters' behaviour	Gives vague description of characters' behaviour	Inability to describe characters' behaviour
Describes characters' wardrobe: fashion, colours	Broadly describes characters' wardrobe	No description of characters' wardrobe
Identifies titles in credits	Identifies some of the titles in credits	Inability to identify titles in credits
Differentiates reality from fantasy	Hardly differentiates reality from fantasy	Unable to differentiate reality from fantasy
Reconstructs the story changing the end creatively	Reconstructs the story with lack of creativity	Inability to reconstruct the story

Table 2. Critical reading of TV series.

Sufficiently enough	Moderately critical	Uncritical
Identifies the central theme of the story	Identifies some issues, but not the central theme	Inability to identify the central theme
Identifies the main character and his / her characteristics	Identifies the main character but not his / her characteristics	Inability to identify the main character
Identifies the storyline used to develop the theme	Identifies some plotlines but not the main storyline	Inability to identify the storyline
Identifies the main character's purpose and the difficulties in achieving it	Identifies the main character's purpose but not the difficulties in achieving it.	Inability to identify the character's purpose
Distinguishes supporting characters and their relations to the main character	Distinguishes supporting characters but not their relation to the main character	Inability to distinguish supporting characters
Identifies time and location in the story	Identifies location but not time	No time and location identified
Identifies the hero, the villain, the conspirator, the authority figure and their behaviour in the film	Identifies the hero, the villain, the conspirator and the authority figure but not their behaviour	No hero, villain, conspirator or authority figures identified
Distinguishes fantasy from reality	Hardly distinguishes fantasy from reality	No difference between fantasy and reality
Identifies director's intention	Vague idea of director's intention	Inability to identify director's intention
Recognizes the film's message and highlights the values included.	No values identified in the film	No message or values identified
Reconstructs the story with the same characters and settings in a creative way	Reconstructs the story with the same characters and settings but close to the original	Inability to reconstruct the story

Table 3. Critical reading of films.

Sufficiently enough	Moderately critical	Uncritical
Identifies the product and the brand	Sometimes cannot identify product nor brand	Inability to identify product and brand
Identifies characteristics of the product and their use	Identifies characteristics but not use	No characteristics or use identified
Identifies target audience and users	Target audience and users get mixed up	No target audience or users identified
Describes the advert characters in detail	Gives a description without detail of the characters	Inability to describe the characters
Identifies sound effects and their purpose	Identifies sound effects but not their purpose	No sound effects identified
Describes the signs and labels in detail	Gives broad description of signs and labels	Inability to identify signs and labels
Determines the product efficiency through the advert and gives reasons to justify it	Determines the product efficiency but does not give any reason	Inability to determine product efficiency
Identifies shots, camera movements and their use	Identifies shots and camera movements but not their uses	Inability to identify shots and camera movements
Remembers most important phrases and the slogan in the advert	Remembers some phases but not necessarily the slogan	Does not remember any phase from the advert

Table 4. Critical reading of adverts.

responsibility. Participants integrate these aspects and take part in the training process to become critical viewers, adopting new stances, reconsidering their perceptions and proposing reading and reception alternatives for TV content. Table 5. shows the workshop structure and its different sections as a synthesis of the critical reception model 'Mirando como miramos' (Sandoval Romero, 2007)[5].

This model is closely linked to its implementation

process. The in-depth dialogue with the participants regarding their knowledge of the TV environment and its influence on their lives is the most important part of Module 1. Some explanations about the origin of TV and relevant data are provided at the end of this module, prior to launching a discussion on the behavior and benefits of being a critical viewer. Information about pre-production, production and postproduction processes is provided in Module 2. Practical sessions with the camera are aimed at stimulating discussion on the meaning of viewing, being viewed by oneself and by others. The role of those who work behind the camera is analysed, along with different TV genres such as the soap opera, which is hugely popular in Colombia. A literary resource is used in Module 3 to foster critical analysis. Through Plato's Myth of the Cave, as told in Book VII of The Republic, the participants are encouraged to analyse the text and identify the importance of light and shadows in the perception process, linking what is real (the universe of light) and reality (universe of shadows). This metaphor applied to TV content is useful for understanding the importance of the work that goes on behind the camera. Following this, the proposal presented in Venezuela analyzed the level of critical reception in participants.

The blueprint for this training model was to recognize the active role of children in the reception process

Module 1. Dialogue with the audience with the aim of knowing children's, parents' and teachers' relation to TV	Section 1. Wandering. Integration dynamics for participants
	Section 2. The media and me. Identifying TV functions.
	Section 3. Presentation of the project on Critical Reception
	Section 4. Analyzing how we view. Viewing and critical analysis of a TV program, identifying feelings, anti-values...
Module 2. Media and language. Introducing basic elements of audiovisual language. Participants take part in recording practices.	Section 1. Viewing, self-viewing and to be viewed. Knowledge and language practice. Roles to be played: camera operator, journalist and interviewee. Section 2. Viewing ourselves to learn. Analysing material recorded by participants. Section 3. Creating adverts.
Module 3. Critical reception. Introducing elements of analysis to promote the role of active and critical subjects.	Section 1. From the real to reality. Reflection on these two dimensions through the analysis of TV messages. Section 2. TV Programming. Magazine clipping to create an ideal TV programming

Table 5. Model of the critical reception program «Mirando cómo miramos».

through their reading practices and the media uses. In this case, reception is considered to be a process involving family and school, and for this reason the school was to be the meeting place for parents, caregivers, teachers and children.

3. Outcomes and debate: children begin to be critical viewers

The implementation of the aforementioned indicators in Venezuela and Spain made it possible to assess critical reading levels in children in all the workshops programmed. To this end, children's attitudes are classified as sufficiently critical, moderately critical or uncritical, according to their responses. As an example, the pre-test scores in one of the workshops held in Venezuela were 25% sufficiently critical, 41% moderately critical and 33% uncritical. Immediately after this experiment, a post-test yielded a score of 50% for sufficiently critical and, more importantly, a decrease in the uncritical category from 33% to 14%.

In the 55 workshops carried out in Colombia, 75% of children, 30% of parents and 26% of teachers acknowledged the educational role of TV while 90% of teachers, 70% of parents, and only 19% of children recognized TV's role as information provider. TV as a source of entertainment was acknowledged by 75% of children, 84% of teachers and 56% of parents. According to the results obtained in the pre-test, activities that indicated the lowest critical level corresponded to the identification of previous work by the directors and scriptwriters, and the recognition of audiovisual language and its intention (difficulties in identifying the significance of certain shots or the soundtrack). Other aspects that pointed to low levels of critical reception were the failure to identify intention in

audiovisual documents in general (even when given a guided analysis of the story and structure) and to discriminate between fiction and reality in TV series. In the initial analysis, no more than 20% of participants referred to the audiovisual language, music and shots –without using technical terms–, whereas in the post-test, participants were able to develop the following activities without difficulty:

• Identify and give a general outline of the story.

• Describe the characters: personality traits and physical appearance.

• Identify similarities in settings, story and characters with their day-to-day lives.

• Participate in decisions that are part of the plot.

• Identify the message of the episode.

• Use audiovisual language (shots, sequences, sound effects)

• Identify fiction and intention.

• Distinguish roles in audiovisual production (director, scriptwriter)

• Distinguish fictional/non-fictional audiovisual products and classify their favorite programs.

• Analyse the story structure: beginning, middle and end.

Teaching guide. 'Mirando cómo miramos. Proyecto de formación de recepción crítica'.
Source: http://multiplicandomiradas.blogspot.com.

• Create an audiovisual proposal regarding content and processing.

4. Conclusions

The keys to assessing critical reception levels in children can be a valuable tool for those who advocate the need to train new generations in the critical use of audiovisual media. Some organizations already use the Internet to publicize easily applicable strategies for promoting critical reading in children and adolescents, two of which include 'Music, Film, TV and the Internet. A guide for Parents and Teachers', edited by Childnet International (2010), and 'Using Film in Schools, a Practical Guide', edited by Film: 21st Century Literacy. These training publications enable young people to discriminate when viewing audiovisual content and help prepare them to become independent and critical citizens. There are also a number of useful resources to facilitate critical reception training processes, such as the model presented by Hobbs* (2001), in which teachers are shown how to adapt reading and critical analysis processes through questions that prompt further discussion (table 6).

The ideas put forward by De Abreu (2011:15) have clarified Hobbs' contribution and have proved useful in workshops. According to De Abreu, most media literacy programs are based on these five questions developed, among others, by the Center for Media Literacy in Los Angeles (USA). In table 7, these questions are linked to five key concepts.

It seems that a new projection of the media education concept in relation to people is emerging in the second decade of the 21st century. Technology, human rights and democracy are increasingly linked to media education, and media education is acquiring a wider dimension and incorporating human values: the defence of individual autonomy based on critical thinking, the freedom to query and the right to information, the constructive value of openness and participative dialogue, the promotion of creativity and innovation as

Children in a Telekids workshop in Venezuela (2010).

basic resource in troubleshooting, a communication democracy that should promote political democracy and the values of understanding and respect for cultural diversity and intercultural dialogue (Pérez Tornero & Varis, 2010). «Teaching for communication means teaching for critical thinking and for self-discovery (...). It is positive to train citizens to be independent and capable of expressing their ideas» (García Matilla, 2009: 40).

Although the media education debate has raged for over 30 years, the role of audiovisual literacy in the curriculum is still disputed; meanwhile urgent changes are needed. We are living a multi-literacy age, defined as «the acquisition and command of skills for a personal, social and cultural use of multiple tools and languages in society. Multi-literacy does not exclusively refer to the skills needed to operate new technologies» (Area, Gros & Marzal, 2008: 74). This underlines the importance of the role to be played by teachers, parents and media experts. Media education should be promoted and implemented at school, and families should be involved in the process. We are aware that people attribute values to messages but ignore the media dynamics, audiovisual language and intention behind the content. Audiovisual literacy should be an important part of any citizen's education and the media themselves should be the driving force behind this education.

According to Aguaded (2009: 8), «the new European framework, with the support of the European Parliament and the advance towards international assessment processes in terms of digital and audiovisual competences, are two landmark achievements».

| Who is the author? What is the purpose of the message? |
| Which values and points of view are shown? |
| Which strategies are used to arouse audience interest? |
| How could different people interpret the same message in different ways? |
| What does this message omit? |

Table 6. Questions for critical reading in media education (Hobbs, 2011:150).

Nº	Keywords	Deconstruction: 5 key questions (consumer)	5 basic concepts	Construction: 5 key questions (producer)
1	Author	Who created this message?	All media messages are created	What did I produce?
2	Format	Which creative technique is used to call my attention?	Media messages are constructions in creative language with its own rules	Is my message understandable in terms of format, creativity and technology?
3	Audience	How could different people understand this message in different ways?	Different people interpret the same message in different ways	Is my message attractive and credible for my public objective?
4	Content	Which values, lifestyles and points of view are represented or omitted in the message?	The media have incorporated values and points of view	Did I clearly show values, lifestyles and points of view in the content?
5	Purpose	Why has this message been published?	Most messages are produced to obtain benefits	Did I effectively convey my purpose?

Table 7. Five basic concepts and key questions for consumers and producers regarding construction and deconstruction of media messages[6].

The involvement of the European Parliament is a considerable boost to the implementation of media education, and many studies now evaluate skills levels before undertaking specific programs on audiovisual literacy, such as 'Competencia Mediática. Investigación sobre el grado de competencia de la ciudadanía en España'[7] (Media competence. An investigation into citizens' media skills in Spain). This study was carried out at 17 Spanish universities and has drawn attention to deficiencies in the knowledge and skills necessary for viewers to become critical consumers of media.

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Notes

[1] This law was enacted in 2000 and reformed in 2007. (http://fevensor1.ve.tripod.com/lopna.htm).

[2] See the European Parliament Press Note on media literacy in the digital environment, media literacy for parents and grandparents, copyright and access to ICTs. (www.europarl.europa.eu/sides/getDoc.do?language=es&type=IM-PRESS&reference=2008-1216IPR44614) (28-10-11).

[3] For further information about the teaching material, see Telekids, a fun teaching strategy for audiovisual literacy. (http://www.cntv.cl/prontus_cntv/site/artic/20110420/asocfile/201 10420144405/estrategia_l__dico_educativa__jacqueline_s__nchez .pdf) (28-10-11).

[4] This phase is part of the work developed by the co-author of this article for her PhD thesis on Psychology in the Universidad del Norte, Colombia.

[5] See the Program Model on Critical Reception 'Mirando cómo miramos' (Sandoval Romero, 2007) in «Comunicación y educación para la recepción crítica: resultados de una propuesta integradora». Palabra Clave, 10, 2; 156-154.

[6] See the Center for Media Literacy (www.medialit.org) for more information on media education issues and implementation in primary education. (28-10-11).

[7] Go to www.ite.educacion.es/es/inicio/noticias-de-interes/414-competencia-mediatic for more information on the six dimensions in the analysis: language, technology, reception and interaction processes, production and dissemination, ideology, values, and aesthetics. (28-10-11).

References

AGUADED, J.I. (2009). El Parlamento Europeo apuesta por la alfabetización mediática. Comunicar, 32; 7-8.

AREA, M.; GROS, B. & MARZAL, M. (2008). Alfabetizaciones y tecnologías de la información y la comunicación. Madrid: Síntesis.

CHILDNET INTERNATIONAL (Ed.) (2010). Music, Film, TV and the Internet A Guide for Parents and Teachers. (www.childnet-int.org/downloading/assets/docs/downloads_uk_edition.pdf) (28-10-11).

DE ABREU, B. (2011). Media Literacy, Social Networking and the Web 2.0 Environment for the k-12 Educator. Nueva York: Peter Lang.

FERNÁNDEZ, M. (1998). Hábitos y preferencias televisivas de los estudiantes de educación básica en Antioquia (Colombia). Medellín (Colombia): Secretaría de Educación y Cultura de Antioquia.

GARCÍA-MATILLA, A. (2009). Educar para la comunicación es educar para descubrirse a uno mismo. Comunicación e Infancia, 395; 40.

HOOBS, R. & AL. (2011). Field-Based Teacher Education in Elementary Media Literacy as a Means to Promote Global Understanding. Action in Teacher Education. 33; 150.

LOPNA (1998). Ley Orgánica de Protección al Niño y al Adolescente. (http://fevensor1.ve.tripod.com/lopna.htm) (28-10-11).

LÓPEZ DE LA ROCHE, M. & AL. (2000). Los niños como audiencias. Investigación sobre recepción de medios. Bogotá: Da Vinci.

MARTÍN-BARBERO, J. & TÉLLEZ, P. (2008). Los estudios de recepción y consumo en Colombia. Bogotá: Diálogos Felafacs. (www.dialogosfelafacs.net/dialogos_epoca/pdf/73-06MartinTellez.pdf) (28-10-11).

PÉREZ-TORNERO, J.M. & VARIS, T. (2010). The Media Literacy Movement. Media Literacy and New Humanism. Unesco; 39-42 (http://iite.unesco.org/pics/publications/en/files/3214678.pdf) (10-07-11).

PÉREZ-TORNERO, J.M. (1994). El desafío educativo de la televisión. Barcelona: Paidós.

RINCÓN, O. (2002). Televisión infantil. Voces de los niños y de la industria televisiva. Bogotá: Convenio Andrés Bello, Fundación Restrepo Barco.

SÁNCHEZ-CARRERO, J. & MARTÍNEZ, E. (2009). *Los secretos de la tele: Manual de alfabetización audiovisual para niños y maestros.* Sevilla: Aconcagua.

SANDOVAL, Y. (2007). Comunicación y educación para la recepción crítica: resultados de una propuesta integradora. *Palabra Clave, 2;* 147-163.

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From Chess to StarCraft. A Comparative Analysis of Traditional Games and Videogames

Del Ajedrez a StarCraft. Análisis comparativo de juegos tradicionales y videojuegos

ABSTRACT

From their historical origins games have provided us with dramatic models of the fundamental activities of humankind, such as sowing and harvesting (mancala games), war (chess) and construction (puzzles). However, games based on the same activity change significantly depending on the place and time they belong to, and therefore a comparative analysis between traditional games and videogames can give us a valuable and novel insight into the popular culture of our times. What are the main distinctive features used to represent war in military strategy videogames compared to those used in chess? What are the main differences between the most popular videoludic metaphors of construction and traditional puzzles? The aim of this article is to explore questions like these by making a comparative analysis of the underlying meanings of traditional games and popular videogames. The theoretical and methodological framework is based on game history, game design theory and theory of videogame meaning. The findings reveal elements that shed light on the nuances of meaning that distinguish traditional games from popular videogames of the same genre, and show that the analysis model conceived for this study could be of interest for further research. Finally, we reflect on the relationship between the underlying meanings of the videogames analyzed and certain distinctive aspects of contemporary culture.

ABSTRACT (Spanish)

Desde su origen histórico, los juegos han planteado dramatizaciones sobre actividades fundamentales para la humanidad, como la siembra y recolección agrícola (juegos de mancala), la guerra (ajedrez) o la construcción (puzzles), pero los juegos más populares sobre un mismo tipo de actividad varían de forma significativa en función del lugar y la época a la que pertenecen. En este sentido, el análisis comparado entre juegos tradicionales y videojuegos puede aportarnos una mirada particular y valiosa para profundizar en nuestra comprensión sobre la cultura popular de nuestro tiempo. ¿Qué rasgos distintivos presenta en los videojuegos de estrategia la dramatización de la guerra, en comparación con el ajedrez?, ¿qué distingue a las principales metáforas videolúdicas sobre la actividad de construcción de los puzzles tradicionales?... El objetivo de este artículo es abordar este tipo de cuestiones, a través de un análisis comparativo de la significación de juegos tradicionales y videojuegos populares. Los fundamentos teórico/metodológicos del trabajo se encuentran en la Historia del Juego, la Teoría del Diseño de Juegos y la Teoría de la Significación del Videojuego. Los resultados revelan elementos distintivos significativos entre los juegos tradicionales y algunos de los videojuegos más populares, y permiten verificar el interés de un modelo de análisis concebido para este estudio. Finalmente, en las conclusiones se reflexiona sobre la relación entre la significación de los videojuegos analizados y aspectos distintivos de la cultura contemporánea.

KEYWORDS

Games, videogames, analysis, rules, representation, meaning, communication, culture.
Juegos, videojuegos, análisis, reglas, representación, significación, comunicación, cultura.

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1. Introduction
1.1. Approach

In the mid-1960s, football began to supersede baseball as the most popular sport in the United States. Marshall McLuhan reflected on this phenomenon in a passage from «Understanding Media» (1964: 208-212). According to McLuhan, the public's change in preference could be explained by a cultural shift. He pointed out that baseball is a positional game played in turns, and the players' positions and functions follow a clear hierarchy; thus, it is more in accordance with the tastes of an industrial society. However, football is a more decentralized and fluid game and the players don't play such fixed roles, which seems to be more in line with contemporary society. McLuhan's key idea in this short reflection was that games are dramatic models of fundamental questions in our psychological life, and as such constitute cultural reflections or reactions that are closely related to the society in which they have arisen or the one in which they have become popular (McLuhan, 1964: 208-209) (Egenfeldt-Nielsen, Heide-Smith & Tosca, 2008: 28-29).

This idea of McLuhan's is in tune with the pioneering anthropological and sociological theories about games developed by Huizinga (1998) and Caillois (2001); however, despite the valuable intuitions of these researchers the study of popular games as expressive phenomena with deep cultural roots did not start to take shape until the consolidation of the videogame industry in the 1990s in books such as «Video Kids: making sense of Nintendo» (Provenzo, 1991) and «Hamlet on the Holodeck» (Murray, 1997).

More recently, a theory of videogame meaning has been gradually taking shape in doctoral theses and research works such as those by Frasca (2001; 2003; 2007; 2009), Sicart (2003; 2009a; 2009b), Salen and Zimmerman (2004), Maietti (2004; 2008), Bogost (2006), Ruiz-Collantes (2009) and Pérez-Latorre (2010), who have contributed various analysis tools for exploring the relation between ludic structures (game rules, strategic structures, gameplay dynamics) and the discursive potential of videogames, keeping the focus on the ludic dimension. This means taking the ludic structures as the central elements of the videogame language and leaving the narrative and audiovisual aesthetics more in the background as non-specific compositional layers of the videogame that are less distinctive of the medium.

Within this theoretical framework, the aim of this article is to make a comparative analysis of the meaning of traditional games and popular videogames. The basic hypothesis that underlies this work proposes taking up McLuhan's intuitions once again: there are deep relations between popular games and the culture and era of which these form a part, which can be revealed through an analysis of game meaning.

1.2. Universal game mechanics

In this text we present four comparative analyses of traditional games and videogames that represent the same sort of reoccurring game activity, a «game mechanic» in game design jargon. More specifically, a central game mechanic («core mechanic») is an action or combination of actions that the player (or the character/player in the case of videogames) performs repeatedly to provoke changes in the game state and achieve goals (for an in-depth revision of the «game mechanics» concept see Sicart, 2008).

Based on the work of game historians collected and updated by Parlett (1999), it is possible to identify four universal game mechanics in board games that have survived throughout history and that have always been present in games from different places and cultures (Parlett, 1999: 8-9). These universal game mechanics are: picking up/collecting; catching/hunting; configuration; physical skill/racing.

Picking up and collecting is a game mechanic that is represented in the traditional African family of games called mancala (an ancestral representation of sowing and harvesting), and also in games in which players search for «treasure», following clues that have been planted around the house or garden. Hunting and capturing is the game mechanic of classic strategy games such as chess and checkers, hide and seek, and also marksmanship games such as some ball games, slingshot and darts. Configuration is the game mechanic characterized by puzzles, tangram, naughts and crosses, solitaire, and «Connect four», as well as riddles, because in this type of game players need to combine (coordinate, configure) a series of clues in order to discover the hidden information. Finally, physical skill/racing is the game mechanic characteristic of games of athletic skill, rhythm and physical ability, such as hopscotch, skipping and sack races, as well as boardgames that represent races through dice rolls, such as backgammon and parcheesi.

These universal game mechanics can be considered to correspond to certain fundamental activities for the survival and development of humankind (Parlett, 1999: 8):

• Picking up and collecting corresponds to harvesting and stockpiling food and goods: looking for fruit, harvesting crops, fishing, etc.

• Catching corresponds to hunting and war: hun-

ting animals and confronting enemies, eliminating them or being eliminated.

• Configuration corresponds to building and construction: inventing and putting together useful tools as well as constructing houses or other types of buildings.

• Physical skill/racing corresponds to agility: running, jumping, balancing, etc., which is also indispensable for the survival and development of humankind.

In this research we will examine the most significant contrasts between traditional games and certain popular videogames in terms of the representation (indirect, implicit) of stockpiling food, hunting/fighting in wars, building and physical exercise.

2. Method

The traditional games and videogames compared in this research all have a particularly clear and relevant centrality in one of the game mechanics defined above. We chose games that have remained popular through the ages and videogames with phenomenal commercial success. The games and videogames we contrasted belong to the same game genre (and have a particular «family air» in the terms of Wittgenstein), for example chess is compared with a military strategy videogame and not a «shooter» videogame. Therefore:

• For the representation of stockpiling food we compared the traditional mancala games with the videogames «Pac-Man» and «Katamari Damacy».

• For the representation of war we compared chess with the videogame «StarCraft».

• For the representation of building we compared traditional jigsaw puzzles with the videogame «Tetris».

• For the representation of athletic activity we compared the game hopscotch with videogames from the Wii game console.

To keep the comparative study consistent, we applied the same analysis variables to all the games and videogames considered. We used seven analysis variables taken and adapted from the doctoral thesis «Analysis of the Meaning of Videogames» (Pérez-Latorre, 2010). According to this previous research, an activity represented in a game or videogame acquires certain nuances of meaning basically in function of the following aspects:

1) Actions that make up the activity. The meaning of the main activities in this study (stockpiling food, hunting, warring, building, athletic skill) can vary substantially based on the (micro)actions that compose them in the game or videogame. For example, depending on the game the activity of «stockpiling food» could include different (micro)actions, such as cultivating, searching, fishing, stealing, etc.

2) Activity-function relations. The meaning of an action or activity in the game depends greatly on the function attached to it. Using a hammer has a very different meaning depending on whether it has the function/effect of «breaking glass» or that of «building a

> In verifying the usefulness of the analysis model presented here we have been able to show that the ludic structures and processes have –similarly to the narrative and visual composition structures– an authentic discursive potential, and the only thing that sometimes stops us from deeply appreciating the meaning level of games is that game science is not as developed as the narration, staging and visual communication sciences.

house». In this sense, we can see that the same action or activity can have different functions/effects in videogames compared to traditional games, and thus project very different meanings.

3) Conditions for performing the action (in the «real» plane). A game action or activity will also gain a particular nuance of meaning depending on the main conditions for success the player needs to comply with in order to fulfill their functions in the game (we are referring here to the player's «real» actions and not actions represented on the screen). For example, the meaning of «hunting» in a game/videogame is very different depending on whether it requires the player to use their analytical and reflective skills or their observational powers and reflexes.

4) Shifts in the game experience towards redundancy versus variability. A game experience to obtain a certain objective can be represented as the only way (redundant) to reach that objective or as one possible alternative in the game from among many others. This

also projects certain shades of meaning onto the action/activity in question, as we will see.

5) Opportunities and risks. The actions in strategy (video)games in particular gain meaning in relation to the combination of risks and opportunities associated with them. For example, the offensive strategy in soccer is associated with the opportunity to conquer «enemy territory» but at the risk of leaving your own «home» unprotected, and the inverse in the defensive strategy.

6) Subject versus environment. A key facet of the meaning of games is related to the dialectics between «assimilation» and «accommodation» that Jean Piaget

> Games have always been telling us something interesting about ourselves, about our world and our relationship with it; the problem is, simply, that until very recently we haven't bothered much to listen to them. Now is the time to learn the language in which games speak to us.

established in his psychology of learning (see e.g., Piaget & Inhelder, 2007), which relates to the tensions involved in finding the right balance between personal will and adapting to the surrounding environment. For example, the representation of «social life» in dollhouse games has a sweet, idyllic tone due to the high level of control the player has over the development of the game according to their personal wishes (assimilation), which contrasts with the imperative need in sport to adapt to outside circumstances (accommodation), such as rules that impose rigid limitations, the presence of rival players, the need to compete, etc.

7) Field of action. Finally, the meaning of a certain action/activity can also vary substantially depending on the type of space where it is carried out: the shape of the «game field».

The following are the most significant results obtained from the research. Instead of describing how the variables have been applied in each case analyzed, we focus on those that are most relevant in each case; those that shed most light on the essential distinguishing aspects of the meaning of traditional games and videogames.

3. Main analysis results
3.1. Representation of stockpiling food: Mancala versus «Pac-Man» and «Katamari Damacy»

The seed sowing game or «mancala» is the most popular traditional game in Africa and parts of the Middle East and Asia (Southeast and Central Asia), and there are historical records of this family of games from the 6th and 7th centuries A.D. (Comas, 2005: 30). The mancala game that is played most in Europe is called «awalé». Symbolically it is a representation of agricultural sowing and harvesting. The game is played on a game board with two rows of pits. A certain number of counters (seeds, pebbles, beans) are placed in each pit. The players take turns to «sow» the seeds by moving seeds one at a time into the following pits sequentially. If the last seed in the move lands in an opponent's pit and makes a total of two or three seeds in that pit, this player can pick them up and keep them: they have harvested a crop. The player's goal is to harvest as many seeds as possible.

In the world of videogames, one particular Japanese company, Namco, has created the two videogames that are the clearest metaphors of stockpiling food: the popular «Pac-Man» (1980) and the cult videogame «Katamari Damacy» (1998). As we all know, the «Pac-Man» videogame consists in the character/player moving around a series of mazes trying to eat all the pac-dots in each level and at the same time avoid the enemy ghosts. «Katamari Damacy», on the other hand, the extravagant successor of «Pac-Man» in contemporary videogames, is a surreal «simulator» of a dung beetle: the player controls what is initially a small ball, onto which they need to progressively attach as many objects as possible and make the ball grow to a certain diameter as they move through everyday environments such as houses, gardens, city streets, etc.

There is a fundamental difference in the meaning of «awalé» and that of its main videoludic heirs in relation to the (micro)actions that make up the metaphoric activity of stockpiling food. In awalé this activity is represented as a process that extends from «sowing» to «harvesting» the crop: after making some calculations, the player sows some seeds and then harvests the crop. However, in «Pac-Man» and «Katamari Damacy» stockpiling food is not represented as a pro-

gressive organic development, but rather the opposite, as the player only participates in the very last part of this process: consuming.

In addition, a characteristic of awalé is that the seeds are continually passed from one player to the other. However, in «Pac-Man» and «Katamari Damacy» the elements that the character/player harvests belong to «others» or to «nobody», and there is no process of exchange or alternation in the possession of objects as occurs in awalé.

In awalé, making calculations is a fundamental condition for success, as well as having a balanced crop, since to be able to harvest a crop, the pit cannot be empty or have only one seed, and nor can it be too full (with more than three seeds). «Pac-Man» and «Katamari Damacy» are also very different in this respect. In both, speed takes the place of making calculations as the fundamental condition for success: Pac-Man must skilfully race through the mazes to avoid being trapped by the ghosts, and the protagonist of «Katamari» has a certain time limit in each level for their ball to reach the necessary size, a Sword of Damocles that stamps a stressing rhythm onto the game experience. Likewise, instead of the quantitative equilibrium of awalé, the Namco videogames endorse unlimited accumulation, whether it be pac-dots («Pac-Man») or objects («Katamari»). Both videogames can be considered popular culture symbols of compulsive consumerism, reaching the level of surrealistic hyperbole in the case of «Katamari Damacy», in which the player can end up trying to «consume» telephone boxes, trucks and buildings.

The most significant contrast in the degree of variability in the game experience is between awalé and «Katamari Damacy». While awalé follows an essentially redundant and ordered dynamic in which the sequences of making calculations, sowing and harvesting are repeated in a similar, systematic way, «Katamari» is characterized by a gameplay that is unpredictable, fluid and always surprising. This is because the objects the player can harvest in «Katamari» (from hamburgers to dogs and ice creams to fire extinguishers) are randomly scattered in the game landscape, and there is no set path to follow to harvest them. This harvesting style seems to evoke the contemporary experience of our daily harvesting/consuming in the digital era. With the almost unlimited capacity of our digital «warehouses» and «shelves», who can resist relaxing their selective criteria a bit in the harvesting experience? In this sense, «Katamari Damacy» is to a certain degree a fun ludic parody of the new style of harvesting in the digital era.

Finally, if there is a similarity between the three games it is the limited diversity of the types of actions the character/player can perform: calculate, sow and harvest, in one case, and move/race and take/consume in the two videogames. However, while in awalé this seems to transmit/foster a certain constancy and methodical attitude, the general tone of the Namco videogames seems to express obsession and «monomania», evoking the idea of a consumer fever.

3.2. Representation of war: Chess versus «StarCraft»

It is difficult to say something about chess that has not been said before on innumerable occasions. It is one of the great universal references of popular culture, and originated from the Indian 7th century game Chaturanga. But maybe we can still discover something more in the metaphoric identity of the game if we compare it to one of its most popular successors in the videogame world: the science fiction military strategy videogame «StarCraft» (Blizzard, 1998), one of the best-selling videogames for personal computers in history.

The game is set in the 26th century, when three races from different planets fight for survival and supremacy of the universe: the Terrans, humans exiled from the Earth, the Zerg, an insectoid race, and the Protoss, a humanoid people with highly developed technology and extraordinary psionic capacities. Taking control of one of these races the player attempts to reach different levels in the strategic game.

An essential condition for success in «StarCraft» is the necessity for speed. «StarCraft» was one of the videogames that popularized real-time strategy games, in which the «noble» but also «rigid» image of war in turns, characteristic of chess, disappears, and speed in decision-making and taking action is almost as important as the actual tactical/strategic plans.

The actions which constitute the war in chess represent a face-to-face, direct and honorable battle between two armies, which takes place in a kind of idealized «bubble» in which no element that is external or parallel to the battle is considered. Conversely, in «StarCraft» the war becomes something more than a battle: to be victorious it is essential to control and intelligently exploit the deposits of the last remaining natural resources in the galaxy: «kristalis» minerals and «vespene gas».

Thus, the strategy in «StarCraft» is as much about dominating and controlling the energy sources that appear scattered on each game map as it is about the battles. What appears to be simply a means to an end

(controlling minerals and «vespene» gas) may actually be the key purpose of the game. This typically video-ludic characteristic of the strategic war game is not part of chess, and clearly has interesting connections with the contemporary world, in which control over energy sources such as petroleum has become the cornerstone for understanding the new wars.

In addition to the fight for domination over the natural energy resources, «StarCraft» is also characterized by other actions that go beyond the pure combat moves of chess: spy tactics to obtain information and the race to develop technology.

Chess is the paradigm of games of «perfect information», in which all the information is available to all the players in conditions of equality. In «StarCraft», however, this is very different: the player cannot broaden their range of vision in the game field until they have carried out explorations or launched spy ships to try to gain information advantages over their rivals. Thus, backstabbing becomes part of the game. This is totally unlike the informative transparency of chess, in which although the opponents obviously try to surprise each other, their cards are always on the table.

In «StarCraft» there is also a race to develop technology, and it is crucial for success to upgrade buildings and the soldiers' equipment.

Finally, the idealized equality in chess of the potential of the opposing armies is completely subverted in «StarCraft». In the Blizzard videogame, the player who controls the most natural resource deposits and who is able to exploit them most skilfully can build a far more powerful army than their opponents. Sometimes the battles in «StarCraft» have a clearly foreseeable outcome: an army can be so powerful that it can crush another army in a matter of seconds. On these occasions strategic ability (in the battle) becomes almost ridiculous. It does not matter how good an army general the player is, they cannot even face their enemies until they have understood that the war in «StarCraft» is also, and most importantly, fought in other areas, in the control of the energy sources, information access and the race for technological evolution.

The true war in «StarCraft» effectively takes place before and away from the battlefield, in fact where it is usually said that contemporary wars are fought.

3.3. Representation of building: jigsaw puzzles versus «Tetris»

Although people have played with jigsaw puzzles since the beginning of the 20th century, they were first manufactured in series when they began to be used for educational purposes (to teach geography in British schools) around 1962. More than twenty years later, in 1985, the electronic game «Tetris», designed and programmed by the Russian computer scientist Alexey Pajitnov, revolutionized the concept of the jigsaw puzzle in the collective imagination.

In their discursive projections, the traditional jigsaw puzzle and «Tetris» differ from the very outset in the first steps of the game: in jigsaw puzzles, the player picks up the pieces that they want and begins fitting them together without any pressure; the builder in «Tetris», however, is in a non-stop world without choices, as the pieces never stop falling in an incessant rain from the top of the screen. The player cannot choose which pieces they would prefer to fit into place, the only alternative is to try to delay the inevitable arrival of chaos as long as possible.

Another vital difference between the two games lies in the definition of the objective. For the jigsaw puzzle, completing the one possible construction/image means success, but in «Tetris» there is no one single construction that is equivalent to victory and the pieces do not form a predefined image. Therefore, there is a clear contrast between the construction understood as a great, unique work, in traditional puzzles, and the construction understood as multiple works that incessantly and almost unavoidably supersede each other, in «Tetris». This also represents a contrast between the «romanticism» of the jigsaw puzzle and a certain «tragic realism» of «Tetris», for which the jigsaw puzzle's dream of a final perfect order is a utopia and the player can only try to forestall chaos.

This divergence between «romanticism» and «tragic realism» is accentuated by the fact that the person doing a jigsaw controls the time factor, while in «Tetris» the pieces fall faster and faster so that the player must adapt quickly to the external condition of a time limit.

Unlike in jigsaw puzzles, constructing in «Tetris» is not represented as an activity controlled by humankind (the player), but rather as an unbridled force that advances at its own will, a limit situation that can only be alleviated briefly.

The main condition for success in «Tetris» is to put off the arrival of chaos, and thus the player is constantly trying to slow down the growth of the constructions before the highest point touches the top limit of the screen, in which case the player would lose the game. This suggests an ideal of sustainable growth.

Finally, the two games also differ in the role visual perception plays as a condition for success. In jigsaw puzzles detailed observation has an essential value; however, in «Tetris» detailed vision is not relevant.

The recognition of abstract structural patterns is what commands the most attention in the player's visual experience in the videogame. This could be associated with an underlying dialectic between a global vision that is also abstract («Tetris») versus a local vision that is closer to empirical reality (in jigsaw puzzles).

3.4. Representation of athletic activity: Hopscotch versus Wii

There are many traditional children's games that encourage physical exercise and the development of skills without actually involving chasing and catching. These are games of athletic, perceptive and rhythmic skills such as sack races, skipping and hopscotch.

If there is one videogame design company that has been interested in taking these types of traditional games from the street to inside our homes it is Nintendo, specifically with the Wii game console, with videogames like «Wii Sports» (Nintendo, 2006), «Wii Play» (Nintendo, 2006) and «Mario Kart Wii» (Nintendo, 2008).

Evidently the change in context, from outside to inside, leads to a certain attenuation of physical ability as the key condition for success and an accentuation of the player's perceptive agility and reflexes as metaphoric activities of the physical effort of the character who represents the player on the screen («avatar»).

However, the integration of physical activity into videogames has allowed it to enter worlds full of variability and surprises and leave the everyday places where traditional physical skill games are played: the streets and parks. Thus, the games of the physical skill mechanic have penetrated the territory of fantasy and been released from «realism».

There are two emblematic characteristics in the Wii videogame design that should be highlighted: transparent learning and dynamic adjustment of the difficulty. In the first case, learning the game rules is made easier due to the player's intuitive understanding of how to handle the Wii Remote, an interface that can be used very freely since it has movement sensors. In the second case, a game-difficulty design model automatically moulds the level of difficulty to the player based on the ability they show (Salen & Zimmerman, 2004: 222-223). These two Wii design charac-

teristics together evoke an idealized and to a certain degree pleasurable/hedonist representation of physical/athletic exercise. Clearly, children playing traditional games, like hopscotch, sack races and skateboarding, have to adapt to the inflexible rules, the unchangeable characteristics of the game field and inevitable rivalries without depending on an automatic adjustment of the level of difficulty or other such design elements.

Finally, we need to add that the popular physical/perceptive skill games of the Wii console are strongly promoted to be played in groups, together with the whole family or with friends, through a marketing line called «party games» (e.g., «Mario Party 8», Hudson,

> We have seen that what is behind some of the fundamental trends in game design are the social and cultural characteristics of the era. Therefore, in line with what McLuhan stated for his time, games and videogames can and should be analyzed as dramatic models of essential aspects of our lives, deeply rooted in the culture they form a part of.

2007). As these games are designed to be played with others, playing alone is moved to the background in favor of a more festive feel for the physical skill game mechanic.

4. Final considerations (Discussion)

It is perhaps not strange to observe that contemporary culture, essentially Western society, is characterized by distinctive traits such as compulsive buying, amassing wealth, completing tasks very quickly, stress, fluidity over rigid orders, prioritizing results over the process, conflicts for the control of the world's energy sources, formidable technological development, the key importance of information and access to it, the multiplication of buildings and out-of-control urban growth, the problem of sustainable environmental management, a «global» but also more «abstract» vision of reality, and a sedentary lifestyle.

What could seem surprising, however, is the extent to which these values are represented in the most popular videogames of our times, and in fact constitute their

main distinctive characteristics in comparison to their game ancestors: board games and street games.

We will conclude this study with two key considerations:

First, we have seen that what is behind some of the fundamental trends in game design are the social and cultural characteristics of the era. Therefore, in line with what McLuhan stated for his time, games and videogames can and should be analyzed as dramatic models of essential aspects of our lives, deeply rooted in the culture they form a part of.

Second, in verifying the usefulness of the analysis model presented here we have been able to show that the ludic structures and processes have –similarly to the narrative and visual composition structures– an authentic discursive potential, and the only thing that sometimes stops us from deeply appreciating the meaning level of games is that game science is not as developed as the narration, staging and visual communication sciences. Games have always been telling us something interesting about ourselves, about our world and our relationship with it; the problem is, simply, that until very recently we haven't bothered much to listen to them. Now is the time to learn the language in which games speak to us.

References

BOGOST, I. (2006). *Persuasive Games*. Cambridge: MIT Press.

CAILLOIS, R. (2001). *Man, Play and Games*. Urbana: University of Illinois Press.

COMAS, O. (2005). *El mundo en juegos*. Barcelona: RBA.

EGENFELDT-NIELSEN, S.; HEIDE-SMITH, J. & TOSCA, S. (2008). *Understanding Videogames*. New York: Routledge.

FRASCA, G. (2001). V*ideogames of the Oppressed: Videogames as a Means for Critical Thinking and Debate*. Georgia: Institute of Technology, Tesis del Máster of Information Design and Technology. (www.ludology.org/articles/thesis) (11-10-2011).

FRASCA, G. (2003). Simulation versus Narrative: Introduction to Ludology. In WOLF, M.J. & PERRON, B. (Eds.). *The Video Game Theory Reader*. London: Routledge; 221-235.

FRASCA, G. (2007). *Play the Message. Play, Game and Videogame Rhetoric*. IT University of Copenhagen: Tesis Doctoral.

FRASCA, G. (2009). Juego, videojuego y creación de sentido. Una introducción. *Comunicación*, 7; 37-44. (www.revistacomunicacion.org) (11-10-2011).

HUIZINGA, J. (1998). *Homo ludens: el elemento lúdico de la cultura*. Madrid: Alianza.

MAIETTI, M. (2004). *Semiotica dei videogiochi*. Milano: Unicopli.

MAIETTI, M. (2008). Anada i tornada al futur: temps, durada i ritme en la textualitat interactiva. In SCOLARI, C. (Ed.). *L'homo videoludens*. Vic: Eumo; 53-76.

MURRAY, J. (1997). *Hamlet on the Holodeck. The Future of Narrative in Cyberspace*. Cambridge: MIT Press.

MCLUHAN, M. (1964). *Understanding Media: the Extensions of Man*. New York: The New American Library.

PARLETT, D. (1999). *The Oxford History of Board Games*. Oxford: Oxford University Press.

PÉREZ-LATORRE, O. (2010). *Análisis de la significación del videojuego*. Barcelona: Universitat Pompeu Fabra, Tesis Doctoral. (http://tdx.cat/bitstream/handle/10803/7273/topl.pdf?sequence=1) (11-10-2011).

PIAGET, J. & INHELDER, B. (2007). *Psicología del niño*. Madrid: Morata.

PROVENZO, E.F. (1991). *Video Kids: Making Sense of Nintendo*. Cambridge: Harvard University Press.

RUIZ-COLLANTES, X. (2009). Marcos jurídicos de mundos lúdicos. Tipologías de reglas en juegos y videojuegos. *Comunicación*, 7; 16-36. (www.revistacomunicacion.org) (11-10-2011).

SALEN, K. & ZIMMERMAN, E. (2004). *Rules of Play: Game Design Fundamentals*. Cambridge: MIT Press.

SICART, M. (2003). Family Values: Ideology, Computer Games & The Sims. Congreso Level Up de Digital Games Research Association, *Utrecht*, 4-6, noviembre (www.digra.org/dl/db/05150.09529) (11-10-2011).

SICART, M. (2008). Defining Game Mechanics. *Game Studies*, 8 (2). (gamestudies.org/0802/articles/sicart) (11-10-2011).

SICART, M. (2009a). *The Ethics of Computer Games*. Cambridge: MIT Press.

SICART, M. (2009b). Mundos y sistemas: entendiendo el diseño de la gameplay ética. *Comunicación*, 7; 45-61. (www.revistacomunicacion.org) (11-10-2011).

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● Marisol Gómez, Sergio Roses & Pedro Farias
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The Academic Use of Social Networks among University Students

El uso académico de las redes sociales en universitarios

ABSTRACT

This paper examines the academic use made of the social networks by university students through a survey conducted among a representative sample of students at Universidad de Málaga (Spain) (n=938) and two discussion groups. Given that network consumption has profoundly penetrated the daily routines of the students, the vast communication possibilities of these channels could be considered for educational use in the future despite a predominance of entertainment-related use. We discuss the most suitable networks for academic use, which type of activities may be most widely accepted among the students and which social networking tools could be most useful for academic purposes. The results indicate that consumption of social networks in the student population surveyed is very high. In addition, the students show a favourable attitude to lecturers using social networks as an academic resource. However, the frequency of use of such networks for academic activities was rather low and, on average, the most frequently used academic activities are those initiated by the students themselves, such as answering queries among peers or doing coursework. The perceived low academic support on social networks may mean that lecturers take only limited advantage of their potential.

ABSTRACT (Spanish)

El uso académico que hacen los universitarios de las redes sociales es el estudio que se presenta a partir de una encuesta administrada a una muestra representativa de estudiantes de la Universidad de Málaga (n=938) y dos grupos de discusión. Dado que el consumo de redes se ha implantado profundamente en las rutinas diarias de los estudiantes, las vastas posibilidades comunicativas de estos canales podrían considerarse para sacar provecho educativo en el futuro, a pesar del predominio del uso dirigido al entretenimiento. Se discuten cuáles son las redes más adecuadas para su uso académico, qué tipo de actividades pueden tener mejor acogida entre los estudiantes y qué herramientas de las redes sociales podrían ser más útiles para propósitos académicos. Los resultados indican que el consumo de redes sociales de la población estudiada es muy alto. Así mismo, los estudiantes presentan una actitud favorable a que los docentes utilicen las redes como recurso educativo. Sin embargo, la frecuencia con la que los estudiantes dan un uso académico a las redes es más bien escasa y, en promedio, las actividades académicas con frecuencia de uso más elevada son aquellas que parten de la iniciativa de los propios estudiantes, como la solución de dudas inter pares o la realización de trabajos de clase. Del escaso apoyo académico percibido en las redes por los estudiantes, se deduce un limitado aprovechamiento por parte de los docentes.

KEYWORDS

Social networks, educational use, EHEA, learning, students, university, virtual, teaching innovation.
Redes sociales, uso pedagógico, EEES, aprendizaje, estudiantes, universidad, virtual, innovación didáctica.

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1. Introduction

Universities are facing classfuls of digitally native students who are demanding a new kind of teaching. They have been brought up under the influence of audiovisuals and the web. The new technological tools (social networks, blogs, video platforms, etc) have given them the power to share, create, inform and communicate and have become an essential element in their lives.

All the applications or social media to have emerged from the Web 2.0 entail active participation by the users, who have become both producers and recipients. Particularly worthy of note are the social networks, which have become a true mass phenomenon (Flores, 2009). In fact in Spain, as shown by the Social Networks Observatory (January 2011), «The Cocktail Analysis», 85% of web surfers are users, with two active accounts per user on average.

Social networks have gone universal. Young people have fully incorporated them into their lives. They have become the ideal space in which to exchange information and knowledge in a swift, simple and convenient way. Teachers may be able to take advantage of this situation and of the students' predisposition to using social networks to incorporate them into their teaching. «The use of social networks, blogs, video applications implies (…) taking information and education to the places that students associate with entertainment, and where they may approach them with fewer prejudices » (Alonso & Muñoz de Luna, 2010: 350). Thus, De la Torre (2009) points out that it is no longer a waste of time for young people to browse the internet or to use social networks, as they are assimilating technological and communications competences that are crucial in the contemporary world. This means that, together with a merely social use, as a space and a route for communication, information and entertainment, networks possess vast potential for the educational sphere, and evidence is emerging that students are favourably disposed towards the academic use of social networks (e.g.: Espuny, González, Lleixà & al., 2011).

In the juncture of the European Higher Education Area (EHEA), the social media in general and the social networks in particular provide several ways for addressing the challenges of higher education, both from the technical and the educational point of view. In fact some of their inherent characteristics, such as collaboration, free dissemination of information or generation of own content for the construction of knowledge have been applied on an immediate basis to the educational field (De Haro, 2010). This means

that the student develops some of the competences highlighted by the EHEA: personal (self-learning and critical thought, recognition of diversity); instrumental (visual culture, computer skills); or systematic (research potential or case-based learning) (Alonso & López, 2008).

The networks permit and favour the publication and sharing of information; self-learning; teamwork; communication, both between students and between pupil-teacher; feedback; access to other sources of information that support or even facilitate constructivist learning and collaborative learning; and contact with experts. As a whole, all of these applications and resources make learning more interactive and significant and above all allow it to develop in a more dynamic environment (Imbernón, Silva & Guzmán, 2011).

This is why its use and familiarisation can be very helpful both in the learning phase and for the student's professional future, given that the vast majority of businesses are already employing such applications in the performance of their functions.

2. Material and methods

The objective of our research is to describe the academic use that college students make of commercial social networks. We employed a methodological design that combines qualitative and quantitative techniques. The weight of the quantitative part was greater, as we sought to extrapolate the results to the surveyed population as a whole. The essential method in this work was a descriptive survey of a sociological nature.

The surveyed population was constituted by undergraduate and graduate students registered at Universidad de Málaga (UMA). The population size was set at 32,464 students, according to the figures provided by the latest available official statistics published (SCI, 2010).

The population is spread over five branches of learning. Each branch is divided into degrees and undergraduate and graduate studies. According to the statistics, the proportion in each branch of learning and in each cycle with regard to the population total is the following: undergraduate students, 69.91% and graduate students, 30.09%; Law and Business Science, 58.70% of the total of individuals; Technical, 22.57%; Humanities, 7.33%; Health Sciences, 5.79%, and Experimental Sciences, 5.61%.

Sampling of a probabilistic type by conglomerates was used, corresponding to the five branches of learning (e.g.: Experimental Sciences, Health Sciences, Humanities, Technical and Law and Business

Science) for each cycle. The choice of degree holder to be interviewed in each conglomerate was made in a simple random way based on the use of a computer program. The population structure was preserved by setting the quota of the cycle and branches of learning, then calculating the proportional number of surveys to be conducted according to the relative weight of the quota in the population structure. The size of the sample set for the study was 1033 students for a confidence level of 95% and a confidence interval of +/-3%.

A specific questionnaire was designed for the research. We adapted to the research objectives some questions from other questionnaires that had been reviewed in existing scientific literature (AIMC, 2011; Caballar, 2011; Valenzuela, Park & Kee, 2009; Ledbetter, Mazer & al., 2010; Ellison, Steinfield & Lampe, 2007; Monge & Olabarri, 2011) and new questions emerging from two discussion groups were drafted.

The objectives of the groups were to explore the field and extract qualitative information. A convenience criterion was applied to the selection of participants (Journalism and Advertising and Public Relations students). The size of the groups was seven and ten participants. The interview lasted no more than an hour and a half. A themed script was used for moderating, which in the first half of the sessions gave little direction to allow the discourses to emerge naturally, with more direction given in the second half in order to clarify specific issues on the content of the questionnaire. The audio of the sessions was recorded and then transcribed, coded and analysed.

The questionnaire was later redrafted and an exploratory pilot study was conducted. All the questions except for one were closed. Likert-type, five-point self-applied scales were employed (e.g.: scales of quantity, frequency or degree of accord), which provided averages and deviations. In addition, dichotomic multiple-answer questions were also used as well as questions with category-type answers. The questions explored the frequency with which the networks are used for different academic-type activities in a normal week (e.g.: doing coursework), the degree of acade-

mic support perceived in the networks, the monitoring of the university through the networks, the academic relationship between students and teachers through them, or the students' assessment of the possibility that teachers would use them as a teaching resource in detriment of the virtual campus. In addition to these, the questionnaire obtained other socio-demographic data and data on consumer habits and general uses that shall not be given an in-depth treatment in this paper.

The fieldwork was performed during the second week of April 2011. The group of survey takers was

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constituted by 21 research volunteers who gleaned specific information on how to administer the surveys and assist with any doubts among the respondents. The data obtained through the survey generated a database that was analysed with the scientific software PASW Statistics v.18. After reviewing and refining the data matrix, the classic resources of descriptive statistics were used, such as summary statistics, frequency tables and graphics.

3. Results

After discarding erroneous and incomplete surveys, the final size of the sample was 938 students. The distribution of respondents by learning area was as follows: Social Sciences and Law, 60%; Technical, 25.4%; Health Sciences, 6.6%; Experimental Sciences, 4.3%, and Humanities, 3.7%. Moreover, 68.01% of respondents were undergraduate students and 31.9% graduate students. 54.8% of respondents

were women against 45.2% of men. And the average age was 21.62 years (SD=3.878).

Before describing the specific results on the academic use of social networks, we must briefly highlight some of the data referring to their consumption. The use of social networks is widely extended among the university population. 91.2% of respondents admitted using a social network. The data and percentages that we henceforth recount have therefore been calculated according to this base (n=855) of network users.

On average, respondents use 2.25 networks (SD=1.19). From among them, the one used by the highest percentage is Tuenti (89%), followed by Facebook (74.9%) and Twitter (25.5%). Other networks do not in themselves attract more than 7% of respondents (e.g.: MySpace, Fotolog, LinkedIn, Hi5, Xing, Flickr). The use of networks among university students has become a quotidian activity that forms part of their daily lives. The majority connects to the networks several times a day (53%), with the most intense consumption occurring between 19.00 and 00.00 hours. Furthermore, on average they agree that «the use of social networks forms part of their habitual tasks» (M=3.43. SD=1.301) (Likert scale of 1 completely disagree to 5 completely agree).

On average, respondents spend a fair amount of time connected to the networks from their homes (M=4.21. SD=0.944) (scale of 1 not at all to 5 a great deal), and while they connect fairly little while in college (M=2.29. SD=1.082), it takes second place in connection time. Asked for the reason why they use the networks, respondents most often answered «to keep up with what is happening in my social environment» (75% of respondents), «for entertainment» (61.8%) and «to study» (24.7%). In addition, college students are experienced users of networks, as almost all respondents (97.3%) have been participating in them for more than a year.

The students were asked about the amount of time they dedicate to the use of the different tools provided by the networks (Likert scale of 1 not at all to 5 a great deal). Private messages are the most widely used tool, with photos and chats also being habitually used. In contrast, the averages for the rest of the tools point to fairly limited use (table 1).

Within a single space, networks allow you to perform multiple activities. From among the possible ones, those to which students dedicate the most time are: «arranging to meet up with my

Table 1. Amount of time dedicated to each tool (Scale of 1 not at all to 5 a great deal)		
	Avg.	Stand. Dev.
Private/messages	3.77	1.001
Photos	3.47	1.176
Chat	3.46	1.289
Wall/news	2.79	1.228
Videos	2.63	1.234
Events	2.26	1.125
Music player	2.22	1.414
Notes	2.19	1.205
Content links	2.10	1.197
Groups	2.01	1.155
Games	1.96	1.255

Table 1. Amount of time dedicated to each tool
(Scale of 1 not at all to 5 a great deal).

group of friends» (M=3.75. SD= 1.198); «finding out what is happening in my group of friends» (M=3.48. SD=1.102); «commenting on photos/videos» (M= 3.17. SD=1.178); and «sharing information, files, photos, documents» (M=3.09. SD=1.212) (table 2). These data confirm the conclusions of the report «The Information Society in Spain 2010», which reports that while penetration of networks is increasing (from 28.7% in 2009 to 50% in 2010) and its use as a form of communication is growing (from 2% in 2008 to 13% in 2010), there is a decrease in the use of text messages (with a drop in invoicing of 19.3% between 2009 and 2010), in landline telephony (8.3% less than in 2009), in mobile telephony (4.1%) and email (from 91% in 2009 to 88.6% in 2010).

3.1. Academic use of social networks

The principal objective of our research was to learn about the academic use of social networks that students make. First, we asked ourselves whether the networks were just a new distraction from university studies. The majority of respondents indicates that

Table 2. Time dedicated to different activities on social networks (Scale of 1 not at all to 5 a great deal)		
	Avg.	Stand. Dev.
Arrange to meet my group of friends	3.75	1.198
Find out what is happening in my group of friends	3.48	1.102
Comment on photos/videos/other comments	3.17	1.178
Share information, files, photos, documents	3.09	1.212
Gossip/browse	3.09	1.382
Get back in touch with other people	2.96	1.139
Find out about current affairs (news)	2.80	1.255
Tell about what I'm doing	2.33	1.247
Make friends	2.08	1.046
Use the apps and games on the SN	2.06	1.234
Share my feelings	1.91	1.091
Make new professional contacts	1.76	0.954
Look for a partner/date	1.58	1.021

Table 2. Time dedicated to different activities on social networks
(Scale of 1 not at all to 5 a great deal).

time has been taken from other activities to dedicate it to the networks. More than half of students dedicate less time to «watching television» and to «doing nothing». Social networks are therefore taking up leisure time. However, activities with an academic profile such as «studying» and «reading» were also pinpointed by a relevant percentage of respondents (table 3).

Table 3. Activities to which you dedicate less time since you use social networks. Multiple answer.	
	Percentage
Watching television	55.0%
Doing nothing	54.6%
Studying	35.2%
Reading	24.8%
Sleeping	15.9%
Listening to the radio	14.6%
Did not tick any activity	13%
Doing sport	11.5%
Other activities	11%
Going to the cinema	8.5%
Walking/Spending time with friends-family	8.1%
Working	5.6%

Table 3. Activities to which you dedicate less time since you use social networks (Multiple answer).

We specifically asked for the academic activities they performed through the social networks. None of the academic activities suggested has attained the average of three on a five-point scale, with 5 being very frequently. This means that on average they are infrequently performed. To resolve queries about a subject, whether in the day-to-day or at exam time; to remain apprised of the pace of the class; and to perform group tasks are on average the activities most frequently performed, though the averages indicate that the tasks are not very frequent. The less habitual ones encourage communication with experts and teachers. These are activities that hardly ever take place (table 4).

When consulted about the academic support they find on social networks, students on average tend to disagree (Likert Scale from 1 strongly disagree to 5 strongly agree) with whether they can find people on the networks who will help them to

resolve subject-related queries relating to subjects (M=2.75. SD=1.249) or to exams (M=2.61. SD= 1.266); find people with whom to share and do coursework (M=2.71. SD=1.258) or who will provide them with useful materials for studying (M=2.63. SD=1.249); and to consult general problems relating to their studies (registration, grants, accommodation, etc) (M=2.66. SD=1.258). We can therefore deduce from the answers that students do not perceive that there is any academic support from other people on the networks. Perhaps this indicates that the activities are always initiated by the students and rarely at the indication of the teacher. Proof of this is that there are very few students who have included one of their university lecturers among their network contacts: only 17.5%, against 82.5% who have not done so. And there are even fewer who follow a teacher on Twitter; only 8%.

The survey data indicated that an important percentage of students (42.6%) had included among their contacts the institutional profile of Universidad de Málaga, something that points to their interest in their studies.

However, in order to examine more in depth the expectations of the didactic use made of the networks, we asked the students about the possibility of creating subject groups on one of the social networks. The results are clearly striking, particularly because more than half welcomed it. Generally, those who do not or who are indifferent extend this attitude (as we could see in the qualitative analysis) to the use of the ICTs in general. They are known as pessimistic or anti-ICT students (Gutiérrez, Palacios & Torrego, 2010) (table 5). Given the possibility of using a social network in replacement of the university's virtual campus, the percentages are fairly even, although those who think it is positive visibly stand out (39.8%). 20.4%, in turn, view

Table 4. Weekly frequency of social network use for different academic activities		
	Average	Stand. Dev.
To resolve queries about content or exams with other students	2.82	1.257
To find out what has been covered in class during non-attendance	2.81	1.266
To do coursework	2.65	1.231
To remain apprised of what is happening in a subject (changes, unforeseen events)	2.57	1.299
To exchange lecture notes	2.52	1.270
To exchange useful documentation and resources for the subject	2.50	1.255
To resolve doubts about my life at university	2.28	1.191
To find out about activities organised by my university	2.11	1.105
To organise extracurricular activities	2.10	1.218
To consult recommendations on books or resources made by the teacher	1.79	1.056
To contact experts on the topics of study	1.65	0.955
Tutorials, consultations with teachers	1.64	1.006

Table 4. Weekly frequency of social network use for different academic activities.

it as negative; 27.9% neither positive nor negative, and 11.9% don't know.

Table 5. Rating the possibility of creating a subject group on a social network	
	Percentage
Negative	5.5%
Neither positive nor negative	23.3%
Positive	59.9%
Don't know	11.3%
Total	100.0%

Table 5. Rating the possibility of creating a subject group on a social network.

4. Discussion and conclusions

Basing upon the data obtained, we find ourselves with a paradox. On one hand, university students make intensive use of social networks, which form part of their lives and their everyday tasks – they are practically «connected» all day long. On the other, the academic application and use they make of social networks is scarce, given that the frequency with which they performed all the academic activities surveyed was low according to their scores. Furthermore, the vast majority of students did not have a teacher among their contacts on the networks, nor did they follow them on Twitter. And perceived academic support on the networks was rather scant.

It is likely that the reason for the limited academic use of social networks that students make is, above all, that both the teaching staff and the institutions give it very little importance. Our research has disclosed that the use of networks for academic activities almost always occurred at the initiative of the students and almost never at the initiative of the lecturer, as we were able to substantiate in the discussion groups. Among the reasons that might justify this situation, we can resort to Gutiérrez, Palacio & Torrego (2010), who point out that educational innovation occurs at a slower rate than that at which society evolves and is consequently slower than the rate of technological innovation. The possibilities for interpersonal communication and collaboration afforded by the networks are thus barely made use of in formal education, where educational value is given to interpersonal relations. In this line, Richmond, Rochefort & Hitch (2011) highlight the limited impact that the networks have on current formal teaching. We deduce from this that formal traditional learning is still very deep-rooted in universities, where communication is always unidirectional (teacher-pupil) and where the student finds it more difficult to participate and feel integrated. The

generational gap between students (digital natives) and teachers (digital immigrants) makes it imperative for teachers to acquire training and skills in the use and handling of such tools and to adapt to these new environments. Teachers must become acquainted with, select, create and utilise teaching intervention strategies within the context of the ICTs and within EHEA (Area, 2006; Ruzo & Rodeiro, 2006). That is to say, teaching planning cannot ignore the active and social use of the social networks (Duart, 2009).

In our study, students displayed a positive attitude to using social networks with educational purposes. In fact, among the principal reasons for «study» use, it occupies third place; in addition, the majority of students (59.9%) believes it is positive to create subject groups in one of the social networks; and 39.8% would replace the virtual campus as an educational platform with the social networks. These same positive attitude trends stand out in the above-mentioned study by Espuny, González, Lleixà & al. (2011), where the students did not display a negative attitude towards the educational use of the social networks.

Despite the potentiality of the social networks in the academic sphere, it cannot go unnoticed that «studying» is the third activity from which time was taken in benefit of the social networks, a trend that must be reversed to make educational use of the amount of time they spend on the networks. Once again this leads us to the idea that teachers have an important role to play in fostering the students' academic use and participation. From the lecture room, the lecturer can motivate students' interest. This is why he or she has to convey that this is a tool to support classroom work and that the content they generate and devote to it forms part of their learning, in addition to fostering active participation and cohesion as a group (Castañeda, 2010).

When a lecturer does decide to use social networks in his or her teaching, he or she has to choose one from among the wide range available on the internet. According to the data, we can discuss which commercial networks are the ones that best adapt to the educational sphere, not only for their suitability for teaching practice but also for the greater and skilled use that students make of them, their ease of use and the fact that they are open websites with a low technological profile. In keeping with this reasoning, according to the data of our study – similar to those of other contemporary studies (Tapia, Gómez, Herranz de la Casa & al., 2010 – the ideal networks would be Tuenti, Facebook and, to a lesser extend owing to its reduced penetration, Twitter. Nevertheless, we opt for

Facebook owing to its greater possibilities in regard to applications (fora, chat, texts, videos, etc) and content creation (production of pages). The first strategy of any teacher could consist of creating a group on Facebook with the actual name of the subject, an action that would be given a favourable reception by almost two thirds of the students, according to the survey data[1].

Even while knowing that the didactic or educational uses of the social networks are not the ones that attract the greatest attention among university student respondents, we have still been able to pinpoint several teaching activities performed on these networks: resolving queries, keeping abreast of what is happening in the classroom, group work and sharing information. That is to say, all of them are issues that can be summed up in one main idea: creation and exchange of knowledge. These activities are always undertaken among fellow students, among the group of peers. They occur at the students' own initiative and in an informal and spontaneous manner. Teachers could therefore reinforce them as well as offering the students new optics and formulas to make more academic use of the networks.

According to the assertions of the participants in the discussion groups, using the social networks for such tasks does not entail any additional effort; on the contrary, they discover multiple advantages in them when it comes to sharing information, getting projects done, interacting among them and with lecturers. Such attitudes match the results of other studies (Espuny, González, Lleixà & al., 2011), where students considered that the social networks were especially profitable from the educational point of view.

The academic-type activities that were most often performed in the sample were directly linked to the new active and participative methodologies advocated by the EHEA, that is to say, the exchange and development of knowledge among reduced groups of peers. The introduction of these «well-conceived» activities into the lecture room could entail a change in the educational culture; breach the limitation of space

and time; expedite collaborative work; foster ongoing learning; increase student motivation; foster cooperation, collaboration and cohesion within the group; foster self-learning, responsibility and independence; foster dialogue and communication between students, between students and teachers and between students and experts; foster critical thought; share and improve collective personal knowledge; reduce costs, effort and time; optimise the way the work is performed; facilitate the exchange of information; provide up-to-date and accessible information; provide a collaborative documentation system based on a self-publishing

> Despite a predominance in entertainment-centric use, the positive attitude of the students and the vast communicational possibilities of these channels also enable the didactic use of the social networks so long as the teachers suitably plan and manage these resources. We thus coincide with Castañeda (2010) in that while the educational potential of the social networks is huge, the challenge will consist in awakening the interest of the institutions, teachers and students to integrate them as basic teaching tools.

mechanism; increase freedom in the way the work is organised; and facilitate access to experts.

In short, we cannot rule out the academic use of social networks in the future, given the degree to which it forms part of the daily routine of university students. Despite a predominance in entertainment-centric use, the positive attitude of the students and the vast communicational possibilities of these channels also enable the didactic use of the social networks so long as the teachers suitably plan and manage these resources. We thus coincide with Castañeda (2010) in that while the educational potential of the social networks is huge, the challenge will consist in awakening the interest of the institutions, teachers and students to integrate them as basic teaching tools.

Given that we have found evidence of the students' positive attitude and of a low –though existing–

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use of the networks for academic purposes, future studies might bring their attention to bear on several research questions such as the following: what are the attitudes of the teaching staff to the idea of incorporating social networks into their teaching practices? What use are teachers giving to the networks? Specifically which type of activities? With which educational purposes? How do they assess them? And, of course, and in our view the most relevant one: does the use of social networks in teaching really imply a significant increase in student learning?

Notes

[1] During the 2011/12 academic year a pilot experience in this line will be undertaken in the subject of General Structure of the Media System in the Journalism degree, imparted at Universidad de Málaga.

Support

Referencias

ALONSO, H. & LÓPEZ, I. (2008). Adaptando asignaturas al EEES: el caso de Teoría y Técnica de la Publicidad. In RODRÍGUEZ, I. (Ed.). *El nuevo perfil del profesor universitario en el EEES. Claves para la renovación metodológica*. Valladolid: Universidad Europea Miguel de Cervantes.

ALONSO, M.H. & MUÑOZ DE LUNA, A.B. (2010). Uso de las nuevas tecnologías en la docencia de Publicidad y Relaciones Públicas. In SIERRA, J. & SOTELO, J. (Coords.). *Métodos de innovación docente aplicados a los estudios de Ciencias de la Comunicación*. Madrid: Fragua; 348-358.

AREA, M. (2006). La enseñanza universitaria en tiempo de cambio: El papel de las bibliotecas en la innovación educativa. *IV Jornadas CRAI. Red de Bibliotecas Universitarias (REBIUN)*. Burgos: Universidad de Burgos, 10-12 mayo 2006.

ASOCIACIÓN PARA LA INVESTIGACIÓN DE MEDIOS DE COMUNICACIÓN (AIMC) (2011). *Navegantes en la Red. Encuesta AIMC a usuarios de Internet*. Octubre-diciembre 2010. (http://download.aimc.es/-aimc/navred2010/macro2010_cuest.pdf) (10-03-2011).

CABALLAR, J.A. (2011). *Cuestionario sobre redes sociales on-line*. Grupo de Investigación SEJ494. E-Business. Empresa, Administración y Ciudadano (http://edoctorado.es) (07-03-2011).

CASTAÑEDA, L. (2010). *Aprendizaje con redes sociales. Tejidos educativos para los nuevos entornos*. Sevilla: MAD.

DE HARO, J.J. (2010). *Redes sociales para la educación*. Madrid: Anaya.

DE LA TORRE, A. (2009). Nuevos perfiles en el alumnado: la creatividad en nativos digitales competentes y expertos rutinarios. *Revista Universidad y Sociedad del Conocimiento, 6, 1*; 9.

DUART, J.M. (2009). Internet, redes sociales y educación. *Revista Universidad y Sociedad del Conocimiento, 6, 1*; 1-2.

ELLISON, N.B.; STEINFIELD, C. & LAMPE, C. (2007). The Benefits of Facebook Friends: Social Capital and College Students Use of Online Social Network Sites. *Journal of Computer-Mediated Communication, 12*; 1143-1168.

ESPUNY, C.; GONZÁLEZ, J. & AL. (2011). Actitudes y expectativas del uso educativo de las redes sociales en los alumnos universitarios. R*evista de Universidad y Sociedad del Conocimiento, 8, 1*; 171-185.

FLORES, J.M. (2009). Nuevos modelos de comunicación, perfiles y tendencias en las redes sociales. *Comunicar, 33*; 73-81.

GUTIÉRREZ, A.; PALACIOS, A. & TORREGO, L. (2010). Tribus digitales en las aulas universitarias. *Comunicar, 34*; 173-181.

IMBERNÓN, F.; SILVA, P. & GUZMÁN, C. (2011). Competencias en los procesos de enseñanza-aprendizaje virtual y semipresencial. *Comunicar, 36*; 107-114.

LEDBETTER, A.M.; MAZER, J.P. & AL. (2010). Attitudes Toward Online Social Connection and Self-Disclosure as Predictors of Facebook Communication and Relational Closeness. *Communication Research, 38, 1*; 27-53.

MONGE, S. & OLABARRI, M.E. (2011). Los alumnos de la UPV/-EHU frente a Tuenti y Facebook: usos y percepciones. *Revista Latina de Comunicación Social, 66*; 79-100 (www.revistalatinacs.org/11/art/925_UPV/04_Monge.html) (01-03-2011).

RICHMOND, N.; ROCHEFORT, B. & HITCH, L.P. (2011). Using Social Networking Sites During the Career Management Process. In WANKEL, L.A & WANKEL, C. (Eds.). Higher Education Administration with Social Media: Including Applications in Student Affairs, Enrolment Management, Alumni Affairs, and Career Centers. Bingley (UK): Emerald.

RUZO, S. & RODEIRO, D. (2006). Enseñanza-aprendizaje. In UCEDA, J. & SENÉN, B. (Coords.). *Las TIC en el sistema universitario español 2006: un análisis estratégico*. Madrid: CRUE.

SERVICIO CENTRAL DE INFORMÁTICA (2010). E*stadísticas de alumnos. Grado 1o y 2o ciclo. Curso 2009-10*. Málaga: Universidad de Málaga.

TAPIA, A.; GÓMEZ, B. & AL. (2010). Los estudiantes universitarios ante las redes sociales: cuestiones de uso y agrupación en estructuras elitistas o pluralistas. *Vivat Academia, 113* (www.ucm.es/info/-vivataca/numeros/n113/DATOSS.htm) (25-02-2011).

VALENZUELA, S.; PARK, N. & KEE, K.F. (2009). Is There Social Capital in a Social Network Site?: Facebook Use and College Students Life Satisfaction, Trust and Participation. *Journal of Computer-Mediated Communication, 14*; 875-901.

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The Educational Role of the Digital Media in the Integration of Immigrants in Spain: elmundo.es and elpais.com

El papel educativo de la prensa digital ante la integración de los inmigrantes en España: elmundo.es y elpais.com

ABSTRACT

The objective of the present study is to highlight the importance of online newspapers in the formation of public opinion, by discovering whether they promote positive or negative attitudes towards immigration or contribute to increasing awareness about the impact of the digital press in educational and developmental terms. With this in mind, we carried out a comparative study of the digital versions of the two widest selling, broad-based daily newspapers in Spain: el mundo.es and el pais.com. We used the same methodology as that used in Comparative Education, analyzing the content of articles published between January 2009 and June 2010. Although there are many similarities between the two newspapers and both coincide in supporting the process of integrating immigrants into Spanish society, they differ in the strategies to be followed for achieving the sought-after goal of peaceful coexistence between migrants and the host community. «El Mundo» tends to favour adopting strategies that encourage immigrants to adapt to the established norms and guidelines of the host society; in the articles of «El País», on the other hand, the requirement for them to adapt is not regarded as necessary. However, the various ideological lines expressed in the articles that we analyzed enable us to draw the conclusion that they do not coincide to a significant degree with the editorial line of the newspaper publishing them.

ABSTRACT (Spanish)

El objetivo del presente estudio consiste en poner de relieve la importancia de la prensa digital en la formación de opinión que tienen los ciudadanos, detectando si fomenta actitudes positivas o negativas en torno al hecho migratorio y coadyuvando a una mayor toma de conciencia sobre la incidencia educativa y formativa de la misma. Con esta pretensión se ha realizado un estudio comparado de las ediciones digitales de los dos diarios generalistas de pago con mayor tirada en España (elmundo.es y elpais.com), utilizando la metodología propia de la Educación Comparada y el análisis de contenido de los artículos publicados entre enero de 2009 y junio de 2010. Aunque son numerosas las similitudes halladas entre ambos diarios y coinciden en su apoyo al proceso de integración de los inmigrantes en la sociedad española, difieren en las estrategias a seguir para alcanzar la deseada convivencia. «El Mundo» se muestra más bien partidario de la adopción de estrategias que pasen por una adaptación de éstos a las normas y pautas establecidas en la sociedad de llegada. Mientras que en los artículos de «El País», esta adaptación no se contempla como un requisito imprescindible. Sin embargo, las diversas líneas ideológicas puestas de manifiesto en los artículos analizados nos permite inferir que no muestran un significativo grado de coincidencia con la línea ideológica del diario que los publica.

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1. Introduction

Nowadays, the importance and impact of informal education are beyond all doubt; it could equally well be called diffuse action since its aim and intention is not just didactic, even though this is an unexpected consequence. Since it arises without its aim or intention being simply didactic, even if its consequences are. Its magnitude and potential are such that it deserves proper study and appraisal. Once we become aware of its possibilities and drawbacks, it could be used beyond the narrow confines of school systems as a complementary support medium, in conjunction with other forms of education, to help shape a more just and equitable society, and thereby move beyond the reductionism inherent in traditional school systems that are overly focused on education of a merely mechanical nature.

The transmission of values, the formation of opinions and the dissemination of attitudes and interests through the press and other mass media go beyond the informative role, and even the formative potential of school institutions. Carpenter and McLuhan had already drawn attention to the sheer quantity of the information flow from the mass media which has cracked open the very walls of the classroom: «today we are beginning to notice that the new media are not simply mechanical gimmicks for creating worlds of illusion, but new languages with new and unique powers of expression» (Carpenter & McLuhan, 1974: 236). If many people concurred with this pronouncement in the Sixties when the mass media were far less developed, the statement can only be reiterated with greater force now that the so-called knowledge society is at its height.

In fact, without wishing to pursue the matter of the well-known gulf between «school system» and «education system» too far, we do want to draw attention to the increasing significance of the huge number of educational factors that do not feature in school systems or the education that everyone –whatever the generation, young or old– receives. Among these factors, the mass media occupy a prime position and they have acquired such a dominant role that they occasionally expose the fallacy of the schools' alleged monopoly of education. In the words of Garcia Galindo (1999: 10): «In recent years, «Educommunication» has arisen as a new scientific space, not just the place where education and communication intersect… but increasingly perceived as a distinct space altogether, detached from its common trunks, and concerned with the transfer of information and knowledge».

In recent decades, the societies of Western Europe, in general, and Spanish society, in particular, have become increasingly multicultural in character. As countries receiving immigrants, they have been adopting significant measures to improve the integration of immigrant populations. The Lisbon Treaty, which came into force on December 1, 2009, reinforced the European Union's commitment to design a common immigration policy, stating specifically that it would promote appropriate measures in the matter of immigration and «respect its rich cultural and linguistic diversity (…)» (Official Journal of the European Union, 2010: 17). Despite this common policy, each country is developing its own strategies, causing a proliferation of different measures of a national, state, regional and local flavor. There is nevertheless one general common denominator: hardly any thought has been given to the adoption of measures aimed at the receiving population, among whom the foreign citizens have to live. And it is precisely in this regard that the formative action of the press takes on such great importance.

Combining immigrant cultures with the host country's is not always easy, particularly in those aspects considered to be fundamental. Strategies must be devised and promoted to overcome the possible isolation of foreign groups and cultures, since that would be undesirable. At the same time, we should not be so naïve as to overlook the fact that every culture is going to ensure that it retains its own identity.

Inevitably, the role of the mass media in constructing ways of thinking about immigrants and the migratory phenomenon is a key element in creating and shaping the mindsets, attitudes and opinions of the receiving population, and helping or hindering the integration of foreign groups. For the vast majority of Spanish citizens, once they have left school, their main source of information is the media, especially the press. The education that every individual receives plays a fundamental role in his development as a person, his concept of society and his relationship with others. Today the idea of lifelong learning is more relevant than ever; indeed, the education that we all acquire throughout our lives has a direct impact on the way we conceive of the «other», of those who are «different». The media play a significant role in the citizen's education, particularly now that they are so influential. Furthermore, since most digital press is free and easy to access, its influence, while already great, continues to grow.

From April 1, 1995, when the daily newspaper Avui unveiled its digital version, the Spanish press struck out in a new direction. Printed newspapers,

along with others offering an online edition only –pioneered by «La Estrella Digital» [The Online Star]– gradually swelled their numbers. On the threshold of the twenty-first century and at the height of the crisis in the sector, there was a surge in the growth of digital newspapers, at the same time as business strategies were being redefined in search of the best returns possible from digital editions.

The aim of this study is to highlight the importance of the online press in shaping people's opinions, and to find out whether it fosters positive or negative attitudes about the migratory phenomenon. With this in mind, we carried out a comparative study of the digital versions of the two biggest-selling daily newspapers in Spain (elmundo.es and elpais.com), in which content analysis was particularly relevant, showing the growing importance of this kind of press and contributing to raising awareness of its educational and formative impact.

2. Material and methods

After selecting the subject matter relating to the field of study –articles on immigration– and defining what the unit of comparison was going to be –limited to the digital editions of the daily newspapers «El Mundo» and «El País»– we analyzed all articles published on the subject in these two editions between January 1, 2009 and June 30, 2010, that is a total period of a year and a half. Any article during this period that included the terms «educación» [education] and «inmigrantes» [immigrants] was selected.

344 articles met these conditions in elpais.com and 133 in elmundo.es. Content analysis was applied objectively and systematically to all the articles in the study. A selection was made of the categories employed, of the units of analysis and of the system for counting the information obtained. This technique with its qualitative characteristics, which certainly does not exclude quantitative ones,1 enabled us to codify different parts of the message emitted and transform them into analyzable data by drawing up exclusion categories. Once the content analysis had been effected, a comparative study was performed using the methodology appropriate to Comparative Education. The starting point was the conceptual approach of Professors

García-Garrido and Llorent, who view Comparative Education as an education science characterized by the study of education systems using the comparative method.

Given that this research has an obvious social bias, the interdisciplinary nature of it must be stressed. Using the methodological approach developed by Professors García-Garrido (1991: 150-162) and Ferrer (2002: 95-104), we then followed each of the stages for carrying out a comparative research study proposed by Professor Llorent (2002).

In the latest «Estudio General de Medios» [General Media Survey], published on April 7, 2011, «El País» was top of the list of paid-for generalist newspapers by a considerable margin, with a daily average of 1,997,000 readers, followed by «El Mundo», with 1,245,000 (prnoticias, 2011). In fact, «El Mundo» and «El País» are the two generalist daily newspapers with the highest sales and circulation in Spain. Although «El País» has the edge in its printed format, it is not the case with the digital version, since elmundo.es is the Spanish-language digital newspaper that receives the most visits; it occupies eleventh place on the list of most-visited web sites, and is first among generalist newspapers in Spain. Elpaís.com, on the other hand, is twelfth and second, respectively (Alexa, 2011).

In 1990, «El País» became the second Spanish newspaper to offer an electronic version. Its pioneering system of payment, introduced on November 18, 2002, caused a sharp drop in the number of visits, to such an extent that, in June 2005, it returned to its previous system of free access. However, since then,

> Constructing social reality is the responsibility of everyone; nonetheless, certain social agents and the mass media wield a considerable amount of influence, with the press having a major share. «El País» and «El Mundo» are among the Spanish daily newspapers with the greatest influence on public opinion; they have a considerable impact on shaping both public and published opinion in so far as the attitudes to be adopted towards new groups who comprise our multicultural society are concerned.

and until the present day, «El Mundo» –whose electronic version started in October 1995 with free access from the outset– took the lead among Spanish digital editions (Delgado, 2009), outstripping its main competitor, elpais.com. In short, both newspapers' digital editions have a great impact in the media.

3. Results

To analyze the results, a series of categories were established that were to be of assistance in understanding the comparative study. First of all we focused on the aspect that immediately attracts the reader's attention: pictures. The use of pictorial representations to illustrate the content of an article is a powerful tool for conveying information and, is therefore, an educational medium of great interest. 46.6% of the articles analyzed in «El Mundo» were illustrated and 33.4% in «El País». In the latter paper, pictures of immigrants (27%) and political figures (23.5%) appeared most frequently; likewise in «El Mundo», the pictures were of similar kinds, although photos of politicians assumed greater significance (41.9%) to the detriment of the immigrants themselves (24.2%). In the same political vein, we noticed that political figures or parties were frequently named, or otherwise referred to, in the texts of both dailies: 72.9% in the case of «El Mundo» and 71.5% in the case of «El País». These data lead us to consider that the topic of immigration is, to a certain extent, politicized. Analysis of the pictures used to illustrate articles showed that more than half of them gave a neutral view of migration (54.9% in «El Mundo» and 56.6% in «El País»), although the percentage of cases reflecting a positive (32.2% and 30.4%) and a negative (12.9% and 13%) viewpoint, respectively, is by no means negligible.

Secondly, we focused on the view of the migratory phenomenon that was transmitted by the two digital newspapers. A majority of articles mentioned some particular group –either from the society of origin or the host society– that was directly affected by the news story: 65.4% in «El Mundo» and 72.1% in «El País». A careful search for terms or adjectives associating the immigrant community with negative values revealed only a minority of instances, in both elmundo.es (8.3%) and elpais.com (13.1%).

In the Spanish welfare state, where the national economy is one of the chief concerns of citizens, it came as a surprise to discover that the dailies we analyzed made relatively little connection between immigration and the current economic crisis. In fact, a link was established in only 22.6% of cases in «El Mundo» and 24.1% in «El País». Nonetheless, we did find a link between immigration and the wellbeing of the population, in the sense that the majority of the analyzed articles stressed the prosperity that the native-born population enjoyed in comparison with immigrant groups; this emphasis was more pronounced in the case of elpais.com.

On numerous occasions, issues have arisen –relating to the use of religious symbols in schools and public places, clothing, the construction of buildings for worship, and so on– where religion has been linked with immigration. These issues have in fact been sources of controversy with considerable impact on public opinion; however, we found that 96.2% of the articles in «El Mundo», and 84% of those in «El País» did not focus on the religious aspect and when they did refer to it, the treatment was not negative in «El Mundo» and there were only sporadic negative references in «El País» (just 27 articles).

The last indicator analyzed in this category was the differential treatment between men and women immigrants; we found no difference of treatment in 94.7% of the articles in «El Mundo» and 94.8% in «El País». In the rare cases where a distinction was made, it was almost always in favor of women (85.7% and 72.2% respectively).

The third category of analysis focused on the integration of immigrants in the host society. The data obtained showed that this process was supported in 69.2% of the articles analyzed in elmundo.es, while the figure in elpais.com was 50.6%. However, when we looked further into how integration should be accomplished, we found that 84.7% of the 98 articles published in «El Mundo» on this topic expressed the view that the wished-for coexistence between immigrants and the native-born population had to be achieved by the former adapting to the norms and standards of the host society; by contrast, 171 articles referred to the topic in «El País» and 53.8% of them did not consider adaptation to be a prerequisite.

The two newspapers again showed differences in their views of the coexistence between immigrants and the host society. A relative majority of articles in the online edition of «El Mundo» adopted a positive standpoint towards the topic; on the other hand, those in «El País» took a largely negative stance. Pursuing the topic further, we noted that although a very high proportion of articles did not associate immigration with criminal activity (91.7% and 87.2%), we found a small, but not insignificant, proportion that did make this analogy. Finally, we point out that a similar percentage of articles in both papers were based on official sources (39.8% and 43% in «El Mundo» and «El País», respectively).

4. Discussion

The long-standing but unresolved debate about whether journalism can be objective is beginning to be superseded by the increasingly widespread concept of social responsibility. It is totally unrealistic to isolate a news item from its context, eschewing its interpretive and evaluative dimension. We would not even presume to suggest that we were absolutely neutral in planning, developing and later analyzing this research; it is simply impossible to be completely objective. Nevertheless, the journalist has to stick as closely as possible to the facts and avoid distorting them at all times, while freedom of opinion, on the other hand, should never be called into question.

The necessary utopia of an objective journalism in which there is complete transparency of information must be the compass guiding journalistic activity. But this indispensable guide cannot make us forget that it is difficult to describe the bare facts exactly as they happened. From the relativistic approaches of Protagoras and the interpretive ones of Nietzsche, who told us «There are no facts, only interpretations» (Nietzsche, 1980: 315), to the Talmud when it states «We do not see things as they are; we see things as we are» leaves us in no doubt that each observer perceives reality differently. Even the words used to communicate a news item, the approach used, the author's intentionality, the place occupied by the item in the newspaper, and so on, are imponderables that are difficult to make neutral. However, the absence of pure objectivity must not distance us from the desire to remain impartial when reporting, which does not in any case have to be at odds with committed journalism.

Furthermore, not only does every journalist see things from a different point of view, but his or her cognitive structure– consisting of experiences and knowledge acquired over a lifetime –is a mental neurophysiological support system to which new information is constantly being added, while undergoing continuous assimilation and adaptation[2]. This implies a unique personal subjectivization of the news. A similar process occurs when the reader reads the news. So the reader should not expect to be presented with a single true reality; even if he were, he would inevitably take it upon himself to give it his own personal interpretation. For a person to acquire knowledge, an interpretive process must take place which prevents the existence of an ontic reality far removed from man's here-and-now existence: «Objectivity is the illusion that observations can be made without an observer» (Heinz von Foerster in Watzlawick & Krieg, 1994: 19). In any case, hermeneutic ontology did away some time ago with any suggestion that the objectivist principle of reality could be taken seriously.

None of this need prevent the journalist—conscious of this reality and faced with the difficulty of eli-

		ELMUNDO.ES		ELPAIS.COM	
		f.	%	f.	%
Articles analyzed	2009	J	57.9	279	81.1
	2010 first six months	56	42.1	65	18.9
	Total	13	100	344	100
Where there is a picture, who is in it?	Political Figures	26	41.9	27	23.5
	Immigrants	15	24.2	31.	27.0
	Allegorical	11	17.7	6	5.2.
	Others	10	16.1	51%	44.3
The effect on the society of origin	Positive	61	45.9	12	37.5
	Negative	41	30.8	167	48.6
	Neutral	31.	23.3	48	13.9
The impact on the host society	Positive	60	45.1	126	36.6
	Negative	53	39.8	180	52.3
	Neutral	20	15.1	38	11.1.
There is more emphasis on the wellbeing of the population	Native-born	62	46.6	240	69.7
	Immigrant	51%	38.3	91	26.4
	Neutral	20	15.1	13	3.9%
Is it a question of religion?	Yes	5	3.8	55	16.0
	No	128	96.2	289	84.0
If the answer is yes, what is the attitude expressed?	Positive	3	60.0	19	34.5%
	Negative	0	0	27	49.1
	Neutral	2	40.0	9	16.4
What view is offered of the coexistence between the immigrants and the host society today?	Positive	60	45.1	111	32.3
	Negative	45	33.8	213	61.9
	Neutral	28	21.1	20	5.8

Table 1: Other results of interest.

minating ideological elements and connotations—from respecting a minimal code of ethics and leaving the reader, as far as possible, to be free to process the information received. We consider that, even though it is practically impossible to achieve complete objectivity, the journalist's subjectivity should be no excuse for distorting the news. Moreover, it is no less true that when most of us read a newspaper, we expect to find particular ideological positions expressed in its pages.

Constructing social reality is the responsibility of everyone; nonetheless, certain social agents and the mass media wield a considerable amount of influence, with the press having a major share. «El País» and «El Mundo» are among the Spanish daily newspapers with the greatest influence on public opinion; they have a considerable impact on shaping both public and published opinion in so far as the attitudes to be adopted towards new groups who comprise our multicultural society are concerned. This is particularly so if we agree with Montesquieu (2010) when he declares: «We receive three educations: one from our parents, one from our teachers, and one from the world. The third contradicts all that the first two teach us».

The immigration question is neither trivial nor minor, but an issue that affects an enormous number of people. The United Nations' report on migration and development on June 6, 2006 (UNO, 2006) pointed out that there were 191 million immigrant citizens on the planet, of whom 64 million were in Europe. Therefore, if we wish to construct the European Union and Spain in a realistic way, it is essential that we take into account this huge group of immigrants who currently live in both territories, without forgetting those who will arrive in the near future.

In Spanish and European societies increasingly characterized by multiculturalism, it is essential for people to learn to live alongside the «other», those who are «different». The way to achieve this is to take the actual situation as the starting point and the best way to find out Spanish opinions on the matter is to use the survey on Attitudes to Immigration, carried out by the Center for Sociological Research (CIS) in 2009. The following responses are of particular interest (CIS, 2009):

• The first question asked: «In your opinion, what is the main problem in Spain today? And the second? And the third? After unemployment and problems of an economic nature, immigration came third with 19.1%.

• In Question 9, respondents were asked to rank the importance of particular aspects that should be taken into consideration when allowing a foreigner to come and live in Spain. The most frequent response was that the immigrant should be prepared to accept the country's way of life.

• Question 36 asked: «In your view, what basi-
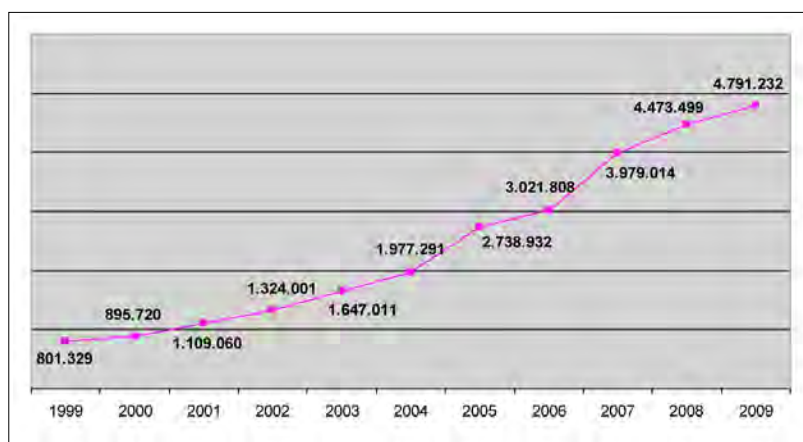
Figure 1: Foreigners in Spain with a registration certificate or a valid residence card.
(Ministry of Labor and Immigration, 2010).

cally influences people's opinions about immigration?» After indicating personal experience as the main influence, the second one was the news in the mass media (19.8%).

• Question 37 asked the respondent «Do you think the image projected by the mass media is…?». Most responded that it tended to be negative (46.3%), whereas only 21% answered that it tended to be positive.

The growing importance of the use of the Internet in recent years is unquestionable. For this reason, it is enough to briefly highlight some data for 2010:

• The total number of dwellings with access to the Internet in Spain was 9,039,764 (Instituto Nacional de Estadística, 2010a).

• 57.4% of Spanish homes (nearly 8.8 million dwellings) had a broadband connection to the Internet, which represented an increase of nine hundred thousand homes over the previous year (Instituto Nacional de Estadística, 2010b).

• The number of Internet users grew by 7.1% in the last year, to more than 22.2 million people (Instituto Nacional de Estadística, 2010 b).

The considerable difference between the two newspapers in the number of articles analyzed –344 in elpais.com and 133 in elmundo.es– may be due to the relative importance each attached to the phenomenon. Given that newsworthy events often have a negative character, when we analyzed the pictures used to illustrate the articles, we were struck by the clearly positive slant that both «El Mundo» and «El País» put on immigration. This, together with other results, indicates quite a trend in the editorial line of these newspapers.

When we looked into whether the migratory question transmitted in the news was evaluated as positive or negative towards the societies of origin of the immigrant groups, we discovered a substantial difference between the two newspapers. We observed that there were more positive connotations than negative ones in elmundo.es, while in elpais.com the reverse was true; there were more negative than positive connotations. The outcome was similar when we checked for the type of effect that it had on the receiving society. In «El Mundo» the positive outweighed the negative, whereas in «El País» the results were reversed, with the negative accounting for 52.3% of the articles on this particular topic.

The small, but real, percentage of articles that associate criminal activity with immigration are a cause for concern. Without doubting the veracity of the correlation in particular instances, care should be taken lest part of the readership extrapolate the information and use it to form undesirable opinions.

Both newspapers support the process of integrating immigrants into the host society, but differ to a certain extent in the strategies that should be followed to achieve the coexistence they are looking for. «El Mundo» tends to favor employing strategies that require the immigrants to adapt to the established norms and standards of the host society, while this is not regarded as a necessary prerequisite in the articles in «El País». There are, moreover, considerable differences in the way each newspaper views coexistence between immigrants and the host society, with «El País» being much more negative than «El Mundo».

There are numerous points of similarity between the two daily papers. In percentage terms, they both coincide in their use of official sources, the relative absence of negative connotations concerning immigrants, the influence of this group on the welfare of the native-born population, the fact that immigrants are seen as having little connection with the economic crisis, the dearth of references to religious questions, and so on.

Although it is perfectly clear that the selection of newsworthy events is not only closely related to the objectivity of the facts, but also, in this case, to the different views and interests of the editors, the various ideological lines that appeared in the articles analyzed enabled us to conclude that they did not coincide significantly with the ideological stance of the newspaper that published them. Truthful information not distorted by political and economic interests must become the driving force of a society that seeks to have free citizens with a respect for cultures other than their own. An education based on equality and pluralism must be the pillar on which any society that claims to be fair and democratic rests (Ruiz Echeondo, Medina & García, 2001).

In our analysis of the informational discourses, we reaffirm the existence of different contextualizations, interpretations and evaluations of reality, demonstrating the impossibility of maintaining a so-called neutral stance. Isolated events cease to exist when they come into contact with the senses and minds of both journalist and reader; their interpretations place us squarely in the field of hermeneutics.

Notes

[1] Although, Berelson, the founder of content analysis, would state that this is «a research technique for the objective, systematic, and quantitative description of manifest content of communication» (Berelson, 1952: 18).

[2] We agree with Jean Piaget, who pointed out that our intelligence is constructed on the basis of our biological inheritance, which limits its existence and at the same time makes it possible. In this, there is a continuous process of adaptation whereby two complementary processes are produced simultaneously: A. Assimilation of the external world to our mental structures B. Accommodation of the mind to new knowledge. Both involve continuous cognitive restructuring, through which our mind is constructed and our thoughts are shaped.

References

ALEXA (2011). *Top Sites in Spain*. *The Web Information Company*. (www.alexa.com/topsites/countries/es) (24-04-2011).

BERELSON, B. (1952). *Content Analysis in Communication Research*. Nueva York: Free Press.

CARPENTER, E. & MCLUHAN, M. (1974). El aula sin muros. Barcelona: Laia.

CIS (2009). *Actitudes hacia la inmigración (III)*, Estudio 2.817. (www.cis.es/cis/opencms/-Archivos/Marginales/2800_-2819/2817/Es2817.pdf) (04-05-2011).

DELGADO, A. (2009). Quince años de prensa digital en España. In CEREZO, J. (Dir.). *La revolución de la prensa digital*. Madrid: Época Comunicación e Imagen; 11-16.

DIARIO OFICIAL DE LA UNIÓN EUROPEA (2010). Versión consolidada del Tratado de la Unión Europea. *Comunicaciones e Informaciones, marzo, C 83*.

FERRER, F. (2001). *La educación comparada actual*. Barcelona: Ariel.

GARCÍA GALINDO, J.A. (1999). Comunicación, educación y demo-

cracia. *Comunicar, 13*; 10-12.

GARCÍA GARRIDO, J.L. (1991). *Fundamentos de educación comparada*. Madrid: Dykinson.

INSTITUTO NACIONAL DE ESTADÍSTICA (2010a). *Encuesta sobre equipamiento y uso de tecnologías de información y comunicación en los hogares* (www.ine.es/jaxi/menu.do?type=pcaxis&path=/t25/p450&file=inebase) (05-05-2011).

INSTITUTO NACIONAL DE ESTADÍSTICA (2010 b). *Notas de prensa. Encuesta sobre equipamiento y uso de tecnologías de información y comunicación en los hogares* (www.ine.es/prensa/np620.pdf) (05-05-2011).

LLORENT, V. (2002). *Educación Comparada*. Sevilla: Universidad de Sevilla (edición digital).

MARTÍNEZ SALANOVA, E. (1999). Leer críticamente las noticias de política nacional en la prensa. *Comunicar, 13;* 135-142.

MINISTERIO DE TRABAJO E INMIGRACIÓN (2010). *Anuario estadístico de inmigración y emigración*. *Secretaría de Estado de Inmigración y Emigración* (http://extranjeros.mtin.es/es/InformacionEstadis-

tica/Anuarios/) (04-05-2011).

MONTESQUIEU, C.L. (2010). *El espíritu de las leyes*. Libro IV, Cap. IV. (www.laeditorialvirtual.com.ar/Pages2/Montesquieu/Espiritu-Leyes_01.html) (13-05-2011).

NIETZSCHE, F. (1980). *Kritische Studienausgabe*. Munich: Walter de Gruyter/dtv.

ONU (2006). *Boletín ONU, 06/050* (www.cinu.org.mx/prensa/comunicados/2006/06050kofimigraciondesarrollo.htm) (04-05-2011).

PIÑUEL, J.L. (2002). Epistemología, metodología y técnicas del análisis de contenido. *Estudios de Sociolingüística, 3;* 1-42.

PRNOTICIAS (2011). EGM: «El País» (-1,2%) y «El Mundo» (-6,3%) pierden 110.000 lectores. Prnoticias (www.prnoticias.com/index.php/home/208/10065995) (25-04-11).

RUIZ ECHEONDO, A.; MEDINA, M. & GARCÍA, L. (2001). ¿Fomenta la prensa onubense la integración de los inmigrantes en nuestra sociedad? *Comunicar, 17;* 176-179.

WATZLAWICK, P. & KRIEG, P. (1994). *El ojo del observador. Contribuciones al constructivismo*. Barcelona: Gedisa.

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Attitudes and Beliefs of Secondary Teachers about Internet Use in their Classrooms

Las actitudes y creencias de los profesores de secundaria sobre el uso de Internet en sus clases

ABSTRACT

The work below examines the attitudes and beliefs that secondary teachers have about the use of Internet resources in their practices. It is presented results obtained from a questionnaire (n=1,721) with different dimensions, obtaining data about teachers' attitudes and reasons with respect to the use of Internet resources, respect to teachers' tasks employed for and respect to training teachers received about Internet resources. The study use descriptive and correlation data of answers percentages to questionnaire items. Results show that attitudes are very important to explain the use of these resources in classroom practices. Also, the role that teachers' perception about their digital competencies plays over the possibility to use Internet resources in their classroom practices. These results show differences between teacher in function of age and genre. Finally, teachers' training about Internet has a positive effect on self perception about digital competencies. The results point to the need of research on what beliefs could explain why teachers decide to use or not Internet resources, how they use them and which factors are included.

ABSTRACT (Spanish)

En este trabajo se estudian las actitudes y creencias que los profesores de secundaria tienen sobre la utilización de los recursos de Internet en sus prácticas. Se presentan los resultados obtenidos aplicando un cuestionario (n=1.721) que abarca diversas dimensiones, obteniéndose datos respecto de las actitudes de los profesores en relación al uso o no de recursos de Internet, a las tareas docentes para las que se emplean y con la formación recibida al respecto. Se ofrecen datos de los porcentajes de respuestas a los ítems del cuestionario e índices correlacionales. Entre los resultados destaca la relación entre las actitudes de los profesores y el que introduzcan estos recursos en sus prácticas, así como el papel que juega la edad y el sexo de los profesores en estas actitudes. También se pone de relieve la relación entre la creencia de los profesores en su competencia digital y la probabilidad de que utilicen los recursos de la Red en sus prácticas. Por último, lo resultados destacan la relación que aparece entre la formación recibida sobre Internet y las diferencias en la percepción sobre competencia digital de los docentes. Los resultados subrayan la necesidad de estudiar en profundidad cuáles son las creencias que explican de forma específica la adopción o no de estos recursos digitales, cómo se conforman y qué elementos las definen.

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1. Introduction

The interest in investigating teachers' beliefs, conceptions and knowledge, which have been referred to as teacher thoughts or cognitions (Calderhead, 1996), is due to the key role these constructs play when explaining what teachers do in the classroom (Kagan, 1992; Pajares, 1992), as well as the changes they steadily embrace (Putnam & Borko, 1996). This same notion is shared by researchers into the incorporation of ICTs into educational processes, who posit that the beliefs and conceptions teachers hold regarding the use of ICTs have a key role to play when explaining the processes of deploying these resources in the classroom (Ertmer, 2005; Lawless & Pellegrino, 2007; Aguaded & Tirado, 2008; Mominó de la Iglesia, Sigalés & Meneses, 2008; Froufe, 2000). The aim of this paper is to study this issue, specifically attitudes and motivations regarding the use of ICTs associated with the Internet, as expressed by secondary teachers using these resources. This goal requires clearly delimiting the perspective from which the subject is to be addressed, as the present confusion on the study of teachers' conceptions and beliefs has meant that the results from research into the matter have not had a major explanatory impact on teachers' training and practices (Chan & Elliot, 2004; Pajares, 1992; Fang, 1996).

2. Teachers' beliefs - what are we referring to?

The term «beliefs» has been used in very different ways and with very different meanings in research involving teachers. As reported by Pajares (1992), terms such as beliefs, values, attitudes, ideologies, conceptions and pre-conceptions, personal theories and implicit theories have been difficult to differentiate in the array of standpoints adopted in research in this field.

For our purposes here, the most pertinent distinction is the one established between beliefs and knowledge. Beliefs have a more implicit nature and operate in a less consistent manner than knowledge, whereby they manifest themselves in specific practical situations or in episodes, aiming to be of use in the resolution of this specific situation rather than providing long-term efficacy and validation. Beliefs, which also have a cognitive component, do not seek «the truth» through scientific deduction, but utility instead (Pozo, 2000), creating personal theories that are marked by the social and practical nature that defines them and renders them of such use to people as formal or scientific knowledge (Pozo & Rodrigo, 2001).

According to Nespor (1987), beliefs are formed through experiences that are always linked to personal events and circumstances, so they include feelings, emotions and assessments, memories of past personal experiences, suppositions on the existence of alternative beings and realities, which are not open to outside evaluation or to critical reasoning. They are gradually built up within a vast system that is constantly being reorganised according to the structure and framework of knowledge.

The power this framework of beliefs exerts upon teaching practices is extremely important, among other things because of the role beliefs play in each teacher's activities. Regarding the matter in question here, namely, the use of Internet resources by secondary teachers, the impact teachers' beliefs about their work has on classroom practice has been well reported (Lumpe, Haney & Czerniak, 2000; Mishra & Koehler, 2006), although it has yet to be made absolutely clear whether teaching beliefs have a direct influence on the use of ICTs in the classroom (Wozney, Venkatesh & Abrami, 2006). We can mention research results that reveal how different aspects related to teachers' beliefs and attitudes regarding these technologies are crucial to their use. For example, the beliefs that teachers hold about their own teaching performance are closely linked to their practices, so favourable attitudes towards technologies and a positive perception of one's own digital competence have proven to be prior conditions for the use of computers in teaching (Paraskeva et al., 2007). On the other hand, and in a study conducted by McGrail (2005), teachers referred to the disadvantages of the use of ICTs alluding to teaching considerations associated with the pupils, the teaching process, ethical issues…These teachers were not at all clear about how to adapt the technologies to their teaching styles or how to include them in the syllabus. Furthermore, in a study by Mueller et al. (2008), one of the critical features that distinguished those teachers who successfully used such technologies from those who did not was their attitude towards these resources, studied according to a scale measuring the degree to which teachers considered a computer to be a viable and productive technology and a cognitive tool that could make an appropriate contribution to their teaching activities. Generally speaking, studies on teachers' attitudes and beliefs regarding ICTs, and the Internet in particular, focus on three points:

1) Positive attitudes towards these resources increase the probability they will be used.

2) These positive attitudes are closely linked to the perception teachers have of their own digital competence.

3) Digital competence alone does not explain the

use of ICTs in practical contexts. This competence has to be linked moreover to the belief that teaching will be enhanced by the use of ICTs. In other words, digital competence increases the likelihood of using ICTs for professional purposes, provided this is consistent with the teaching beliefs held by the teachers themselves (Groves & Zemel, 2000).

Nevertheless, although it seems clear that teachers' beliefs about ICTs condition their use in practice, it is not obvious how to alter these beliefs with a view to extending the use of these technologies in the classroom. Along these lines, some of the more realistic proposals do not rely on changing the teachers, but rather on reconsidering the design of ICT resources (Groves & Zemel, 2000). This would involve, therefore, bringing the technological design closer to the syllabus content through such measures as producing digital materials similar to traditional ones to render them compatible with common teaching approaches to classroom subjects. Other authors (Ertmer, 2005), basing themselves on the principle that changes in beliefs can be triggered by personal experiences, vicarious experiences and socio-cultural influences, stress the need for teachers to experience for themselves or through colleagues the positive results of the use of technological resources in the classroom.

In sum, the preceding review points to the need to understand that the beliefs and attitudes teachers have regarding ICTs constitute one of the factors explaining the use of these resources in the classroom. The aim of this paper, therefore, will be to discover the beliefs held by secondary teachers regarding the use of ICTs related to the Internet. More specifically, we shall set out to use the data gathered using a questionnaire with Likert-type scale questions to analyse attitudinal considerations and the motivational ones informing these beliefs, as these aspects have a bearing on the use of digital resources in teaching methodologies, and whether the Internet training received impacts upon teachers' attitudes and beliefs regarding this medium. In short, we are therefore seeking to unravel the frame-

work of beliefs on ICTs as regards teachers and their relationship with the use or not of these resources.

3. Material and methods
3.1. Sample

In order to conduct this research, we sent out questionnaires, as described forthwith in the Procedure section, to 411 schools - just about all the schools teaching compulsory secondary education in the

> We can affirm that the profile of beliefs among the secondary teachers in our sample is informed by two basic aspects: on the one hand, the educational value attributed to Internet resources and, on the other, the knowledge of these resources that is attributed to teachers. Regarding the former, age constitutes a differentiating factor between positive and negative attitudes, with negative ones being linked to older age groups. Regarding the latter, the knowledge of resources, the difference is marked by age and gender, with a lower attribution of digital competence among women and older age groups.

Spanish region of Castilla y León. The characteristics of the sample used are described in table 1 below:

3.2. Procedure

The first stage of the procedure involved preparing the data-gathering instrument. A questionnaire was drawn up that addressed a total of five dimensions. This paper presents data from three of them, as are: (a) attitudes towards Internet resources in relation to the teachers' professional duties; (b) methodological aspects of teaching with the Internet, and (c) Internet training received. Likert-type scales were used for dimensions a and b, with 4 and 5 levels of choice (Hinojo & Fernández, 2002).

The process of preparing the questionnaire was undertaken in several stages, with the last one involving a review of the same by ten secondary school teachers from different subjects. Once all the reviews had been made, the Cronbach's alpha for all the items on

Schools	149 schools (out of a total of 411) 36.4% of the total Type of school: 63.1% state-run, 36.9% private-direct grant
Teachers	Total: 1721 questionnaires received
	Gender: 44.9% male, 53.5% female
	Years of experience: 38.2% between 1 and 10 years of experience, 32.9% between 11 and 20 years, 18.8% between 21 and 30 years, 7.6% more than 30 years.
	Subjects taught: 13.02% humanities and social sciences (geography and history and philosophy), 26.79% languages (Spanish, French, English, Latin and Greek), 32.48% science and technology (mathematics, physics and chemistry, biology and geology and technology), 8.60% art (music and drawing) and 17.84% other subjects (physical education, psychology and pedagogy, and sundry others).

Table 1: Characteristics of the sample.

the Likert-type scales gave a result of 0.89. The questionnaires were sent to all the schools in the sample, and a check was made to ensure they had all been received correctly. Finally, the results received were encoded and loaded into a data matrix that allowed an analysis to be conducted through the SPSS 15.0 statistical program in order to provide the results presented here.

4. Results

The organisation of the results in this section responds to the goal we are pursuing. We therefore first present the percentage data from the answers on attitudes and reasons that the teachers have provided on Internet use in the classroom, together with the correlations of these two aspects according to gender, years of experience and subject taught, using chi-squared tests. Secondly, we present the correlation data that describe the impact the teachers' attitudes and reasons regarding Internet use have on their teaching methods. Thirdly, we provide data to show whether the Internet training received has a bearing on attitudes and reasons regarding the use of this resource among the teachers involved in our research.

4.1 Teachers' attitudes and reasons regarding Internet use

First, Figure 1 presents the results showing the extent to which teachers do or do not agree with the use that can be made

of the Internet in teaching, as well as the reasons explaining why they do or do not use these resources. We can see that the general trend indicates that the highest values correspond to positive attitudes towards this matter. Accordingly, over half the secondary teachers surveyed state that they agree or strongly agree with the fact that the resources provided by the Internet today are essential for teaching. Furthermore, 87.2% disagree or strongly disagree with the notion that Internet resources have little to offer and their usefulness has been overplayed. Therefore, according to these data, we can make the point that teachers have a positive attitude towards Internet resources for classroom use.

As for the motives or reasons teachers give for whether or not they use the Internet, it can be seen (Figure 1) that practically all the teachers agree (92.1%) that one of the reasons for using the Internet is its educational value for pupils. Another reason that appears to merit the agreement of over half the teachers is the lack of resources available to them (52.6%), although this notion contrasts with the disagreement (44.2%) that the teachers also record in this same item. Likewise, most of the teachers seem to disagree with the fact that Internet resources are of no use in teaching (83.7%) and that the legal obligation to
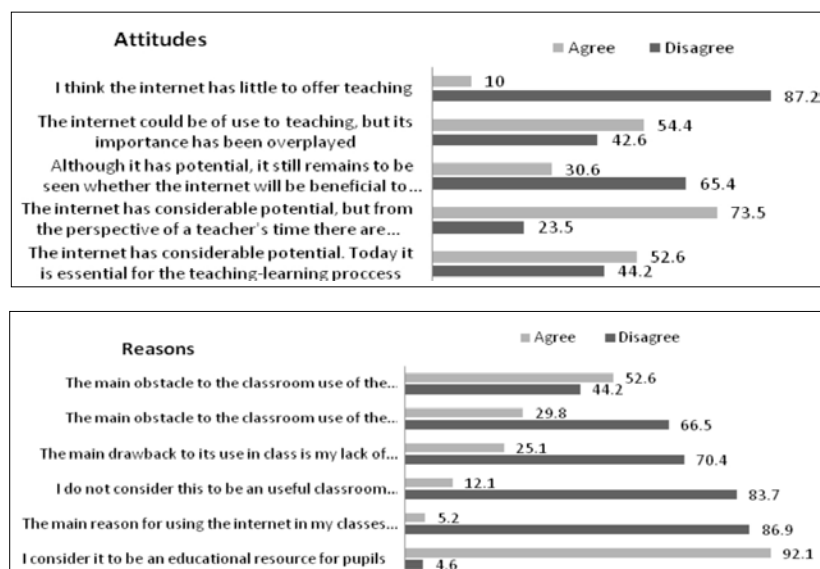
Figure 1: Percentage of agreements and disagreements in attitudes and reasons regarding Internet .

use them (86.9%) or a lack of training and experience (70.4%, 66.5%) are reasons or motives that explain the classroom use or not of the Internet. In short, the reasons that secondary teachers give as the ones carrying the most weight for the use of Internet resources in their classes involve mainly what they consider as favouring the pupils' learning experience, as well as being of use to their classroom practices. As we can see, these results are consistent with the positive attitude that most teachers have towards the Internet.

Once the data have been gathered on the teachers' attitudes and reasons regarding the use of the Internet's digital resources, our focus now turns to discovering whether there are differences in these attitudes and reasons according to the variables of gender, years of experience and the subjects taught by the teachers in the sample. The results obtained accordingly are shown in tables 2 (attitudes) and 3 (reasons).

The correlation analyses conducted through Pearson's chi-squared coefficient (table 2) reveal significant relationships between the attitudes variable and other teacher variables, such as years of experience and the subject taught. In this sense, regarding gender, the most significant result is that being male or female does not have a major impact on the attitudes teachers have towards the use of the Internet in the classroom. In terms of years of experience, all the attitudes items correlate significantly, with the exception of item 5, which is not significant. The significant and positive relationships between these two variables suggest that the more positive attitudes towards the Internet are even stronger among those teachers with fewer years of experience (under 10) than among those with more experience (over 15 years). The subject variable throws up significant differences for item 3, revealing a somewhat sceptical attitude towards the use of Internet in teaching solely in the subjects we have listed under science and technology.

Regarding the relationships between the reasons for use and other variables such as experience, gender and subject (table 3), we have found results that reveal important issues. In general, we find highly significant differences between the various items in the reasons dimension and the different levels of experience. All the answers to this dimension are significant at the 0.01 confidence level according to the years of experience, except for the item: «The main obstacle to the

classroom use of the Internet is a lack of technological resources». A detailed analysis of the results reveals that the longer a person has been in teaching, the more they will be in agreement regarding lack of experience, training and usefulness as reasons for not using the Internet in class. Furthermore, the groups of teachers with more experience are the ones who consider this resource has no educational use for pupils, as opposed to the younger ones who do consider it to be educational and useful, although they consider the lack of

Table 2: Correlations: Pearson's chi-square. Attitudes					
	1	2	3	4	5
Gender	0.578	0.556	0.134	0.228	0.864
Years of experience	0.000**	0.000**	0.000**	0.007**	0.893
Subject taught	0.475	0.152	0.05*	0.057	0.240

** The correlation is significant at the 0.01 level *The correlation is significant at the 0.05 level. 1) I think the Internet has little to offer teaching. 2) The Internet could be of use to teaching, but its importance has been overplayed. 3) Although it has potential, it still remains to be seen whether the Internet will be beneficial to teaching. 4) The Internet has considerable potential, but from the perspective of a teacher's time there are other priorities. 5) The Internet has considerable potential. Today it is essential for the teaching-learning process.

resources to be an obstacle. On the other hand, the gender variable also marks significant differences regarding the reasons for using the Internet. Women are the ones who affirm they do not use the Internet for reasons of lack of resources, experience and training, and because they do not consider the Internet to be useful. Finally, the subject taught also leads to significant differences (0.01 confidence level) regarding the items of lack of resources, experience and training. This means that although the subjects of languages and humanities and social sciences are the ones with the closest agreement with the lack of experience and training as reasons for explaining the non-use of the Internet, in the case of «The main obstacle to the classroom use of the Internet is a lack of technological resources», the art subjects also use it as an argument, as opposed to science and technology subjects where there is disagreement with this statement.

4.2. Impact of attitudes and reasons regarding the use of the Internet on teaching methodologies

There follows a description of the results of the cross-analyses between the dimensions of teaching methodologies applied in class and the resources associated with the Internet, attitudes towards its use and reasons for such use. The data provided below are designed to study in greater detail the relationship between the attitudes and beliefs of the teachers in the sample and the methodology they apply in class.

Appearing first in table 4 are the results of the

Table 2: Correlations: Pearson's chi-square. Reasons						
	1	2	3	4	5	6
Gender	0.021*	0.000**	0.000**	0.007**	0.215	0.222
Years of experience	0.429	0.000**	0.000**	0.000**	0.002**	0.000**
Subject taught	0.000**	0.000**	0.000**	0.253	0.468	0.059

** The correlation is significant at the 0.01 level *The correlation is significant at the 0.05 level
1) The main obstacle to the classroom use of the Internet is a lack of technological resources. 2) The main obstacle to the classroom use of the Internet is my lack of experience. 3) The main drawback to its use in class is my lack of training. 4) I do not consider this to be a useful classroom resource. 5) The main reason for using the Internet in my classes is that I am legally required to do so. 6) I consider it to be an educational resource for pupils.

correlations between the methodology dimension (specifying the teaching tasks using Internet resources) and the attitudes held by teachers. The results are clear: practically all the correlations are significant at a 0.01 level. The indices have a negative sign when the attitudes item is formulated in this direction, which means that negative attitudes correlate with the non-use of the Internet for teaching activities, whereas the positive ones do so with the application of those activities in the teacher's classroom practices. The correlations have a positive sign when the items are formulated in a positive way, which corroborates the trend we have just explained: positive attitudes towards the Internet are associated with the application of Internet resources to teaching activities and vice versa. This general pattern is qualified, showing that attitude is what defines the methodology to be applied with the Internet in class, both for those activities involving the presentation and handling of information, where the greatest significant effects are to be found (p= .376), and for communication and teamwork methodolo-

gies, with the smallest significant effects (p=.169).

Secondly, table 5 contains the correlation results obtained in the analysis of the reasons teachers allude to regarding their teaching methods involving the use of the Internet. It can be affirmed that the arguments carrying the most weight for explaining the use or not of the Internet for their teaching activities are related to the perception teachers have of their experience and training, the usefulness of the Internet for their classes and legal requirements. This means that the correlations between the items we have just listed are all significant at a 0.01 level and negative. Therefore, those teachers that perceive themselves as having a lack of experience or a lack of training are the ones who least use the Internet in class. Likewise, those teachers who consider the Internet resource to be of no use for their classes do not include it in their work either. Those who do not agree that legal requirements are the main reason for using the Internet in their classes are the ones who most use this medium in their teaching activities. On

Table 4: Correlations: Spearman's rho: Methodology-Attitudes					
	1	2	3	4	5
Internet uses					
Accessing quick and direct sources of information	-.245**	-.246**	-.258**	-.145**	.345**
Fostering skills in the handling and evaluation of information	-.189**	-.284	-.260**	-.240**	.370**
Applying the skills pupils have acquired outside school					
within a classroom context	-.151**	-.246**	-.252**	-.222**	.359**
Directing the pupils to a source of information for homework	-.178**	-.209**	-.224**	-.156**	.330**
Encouraging pupils to work on their own	-.210**	-.257**	-.263**	-.212**	.376**
Presenting information					
Illustrating or supporting specific aspects of my classroom explanations	-.211**	-.262**	-.278**	-.207**	.339**
Communication and teamwork					
Creating discussion groups on current affairs during the					
development of topics	-.022	-.125**	-.096**	-.152**	.196**
Arranging shared project work with other schools via the Internet	-.002	-.079**	-.072**	-.122**	.169**
Individual tasks					
Providing materials and resources for further learning activities	-.176**	-.218**	-.247**	-.188**	.348**
Providing materials and resources for remedial activities	-.153**	-.220**	-.197**	-.186**	.351**

** The correlation is significant at the 0.01 level (bilateral) *The correlation is significant at the 0.05 level (bilateral)
1) I think the Internet has little to offer teaching; 2) The Internet could be of use to teaching, but its importance has been overplayed; 3) Although it has potential, it still remains to be seen whether the Internet will be beneficial to teaching; 4 The Internet has considerable potential, but from the perspective of a teacher's time there are other priorities; 5) The Internet has considerable potential. Today it is essential for the teaching-learning process.

Table 4: Correlations: Spearman's rho: Methodology-Reasons for use/non-use						
	1	2	3	4	5	6
Internet uses						
Accessing quick and direct sources of information	.135**	-.290**	-.299**	-.354**	-.201**	.346**
Fostering skills in the handling and evaluation of information	.070**	-.285**	-.287**	-.349**	-.155**	.348**
Applying the skills pupils have acquired outside school						
within a classroom context	.053*	-.258**	-.266**	-.335**	-.128**	.319**
Directing the pupils to a source of information for homework	.089**	-.226**	-.238**	-.298**	-.163**	.298**
Encouraging pupils to work on their own	.094**	-.263**	-.264**	-.364**	-.189**	.359**
Presenting information						
Illustrating or supporting specific aspects of my classroom explanations	.074**	-.294**	-.281**	-.415**	-.195**	.331**
Communication and teamwork						
Creating discussion groups on current affairs during the						
development of topics	.022	-.122**	-.125**	-.109**	-.022	.131**
Arranging shared project work with other schools via the Internet	.018	-.080**	-.075**	-.088**	-.055*	.117**
Individual tasks						
Providing materials and resources for further learning activities	.066**	-.254**	-.254**	-.338**	-.182**	.314**
Providing materials and resources for remedial activities	.073**	-.233**	-.228**	-.315**	-.161**	.271**

** The correlation is significant at the 0.01 level (bilateral) *The correlation is significant at the 0.05 level (bilateral) 1) The main obstacle to the classroom use of the Internet is a lack of technological resources; 2) The main obstacle to the classroom use of the Internet is my lack of experience; 3) The main drawback to its use in class is my lack of training; 4) I do not consider this to be a useful classroom resource; 5) The main reason for using the Internet in my classes is that I am legally required to do so; 6) I consider it to be an educational resource for pupils.

the other hand, a lack of resources as an obstacle to the use of the Internet in class correlates significantly with practically all teaching practices, with the exception of communication and teamwork, which have an anecdotic impact on their application. Yet this result in relation to the item involving a lack of resources reveals that the ones most using the Internet for teaching practices are also the ones who place the most stress on the lack of resources. This means that a lack of resources is not the aspect with the most weight for explaining the reason whether or not the Internet is used in the teacher's work. Finally, a reason that clearly explains the use of the Internet made by teachers is the understanding that this resource has an educational role to play for pupils, as can be seen in the correlation indices listed in table 5.

4.3. Repercussion of the Internet training received on attitudes and reasons for use among teachers

Finally, table 6 contains the correlation results between teachers' attitudes and reasons and the Internet training received. Two aspects stand out in our analysis of the results in these dimensions. Firstly, regarding attitudes, although in general we have already indicated that teachers seem to share positive attitudes towards the Internet, those that have received training during their degree courses or their professional care-

ers at Spain's Teacher Training and Innovation Centres (CFIEs) and other institutions are the ones who by far reveal the most positive attitudes towards the use of the Internet. Secondly, those teachers who have received training, whatever its nature, are the ones who consider themselves to have a greater level of digital competence, as they are the ones who do not consider a lack of experience or a lack of training to be the main obstacle to Internet use in the classroom, and in most of the items this difference is significant at a 0.01 confidence level. It would be of greater interest to study these data in more detail in order to gain more comprehensive information on the type of training received in terms of content and the teaching methodologies used, as it appears to have been put to good use.

5. Discussion

In the light of these data, we can affirm that the profile of beliefs among the secondary teachers in our sample is informed by two basic aspects: on the one hand, the educational value attributed to Internet resources and, on the other, the knowledge of these resources that is attributed to teachers. Regarding the former, age constitutes a differentiating factor between positive and negative attitudes, with negative ones being linked to older age groups. Regarding the latter,

Table 6: Correlations: Chi-square: Attitudes-Reasons/Training							
	1	2	3	4	5	6	7
Attitudes							
1) I think the Internet has little to offer teaching	0.000**	0.233	0.628	0.008**	0.031*	0.001**	0.131
2) The Internet could be of use to teaching, but its importance has been overplayed	0.005**	0.004**	0.545	0.760	0.035*	0.020*	0.019*
3) Although it has potential, it still remains to be seen whether the Internet will be beneficial to teaching	0.005**	0.027*	0.644	0.001**	0.162	0.264	0.010*
4) The Internet has considerable potential, but from the perspective of a teacher's time there are other priorities	0.019*	0.000**	0.076	0.767	0.000**	0.835	0.595
5) The Internet has considerable potential. Today it is essential for the teaching-learning process	0.136	0.564	0.272	0.044*	0.033*	0.174	0.123
Reasons							
1) The main obstacle to the classroom use of the Internet is a lack of technological resources	0.009**	0.679	0.612	0.758	0.358	0.821	0.897
2) The main obstacle to the classroom use of the Internet is my lack of experience	0.000**	0.000**	0.160	0.009**	0.028*	0.004**	0.000**
3) The main drawback to its use in class is my lack of training	0.000**	0.005**	0.173	0.000**	0.059	0.000**	0.000**
4) I do not consider this to be a useful classroom resource	0.000**	0.086	0.017*	0.008**	0.015*	0.026*	0.227
5) The main reason for using the Internet in my classes is that I am legally required to do so	0.047*	0.835	0.531	0.042*	0.581	0.999	0.295
6) I consider it to be an educational resource for pupils	0.001**	0.203	0.034*	0.018*	0.012*	0.030*	0.409

** The correlation is significant at the 0.01 level *The correlation is significant at the 0.05 level. 1) Initial training: as an undergraduate; 2) Initial training: Master's degree; 3) Initial training: courses; 4) Lifelong training: CFIE courses; 5) Lifelong training: Master's degree; 6) Lifelong training: evening classes 7) Self-taught.

the knowledge of resources, the difference is marked by age and gender, with a lower attribution of digital competence among women and older age groups. Finally, training, especially at an initial stage, although also that provided by CFIE teacher training centres, has a positive impact on the assessment teachers make of their own digital competence.

These data ratify what other scholars have found, thereby enabling us to focus on certain aspects with major ramifications for classroom practices.

Firstly, it seems clear that attitudes have a fair degree of influence on the use of Internet resources in classroom practices. Although these attitudes are generally positive, those teachers who consider that these resources have no educational value do not use them in the classroom and this relationship is significant above all in older age groups, as is also reported in the work by Paraskeva et al. (2007). Yet in addition to attitude, the perception teachers have of their digital competence also seems to explain the likelihood they will use Internet resources in their teaching activities. In this case, moreover, the differences are due not only to age, but also to the teachers' gender. Nevertheless, although the role beliefs play in the attribution of the competence itself seems to be a crucial one for the adoption of the resources, the Internet training received is effective for improving this digital competence.

Secondly, these results show that the issue of beliefs and attitudes must necessarily be included on the agenda for research into the use of ICTs in teaching practices and, in particular, the use of the Internet as a teaching resource. An in-depth study is required to uncover the beliefs that specifically explain the adoption or otherwise of these innovations, how they are shaped and the elements that define them, as well as to investigate the training received regarding the Internet, content, educational approaches, as it is a reason that explains the change in the perception of professional competence in terms of these resources. Finally, it is important to pursue lines of research that connect the teaching approaches of teachers with beliefs on ICTs in general and the Internet in particular, given the link that appears to exist between the two factors, without losing sight of how it is all indeed implemented in the practical contexts in which teaching-learning processes actually take place.

Acknowledgements

References
AGUADED, J.I. & TIRADO, R. (2008). Los centros TIC y sus repercusiones didácticas en primaria y secundaria en Andalucía. *Educar, 41*; 61-90.

CALDERHEAD, J. (1996). Teachers: Beliefs and Knowledge. In BER-LINER, D. & CALFEE, R. (Eds.), *Handbook of Educational Psychology*. New York: Macmillan; 709-725.

CHAN, K-W. & ELLIOTT, R.G. (2004). Relational Analysis of Personal Epistemology and Conceptions about Teaching and Learning. *Teacher and Teaching Education, 20 (2004);* 817-831.

ERTMER, P.A. (2005). Teacher Pedagogical Beliefs. The Final Frontier in our Quest for Technology Integration? *Educational Technology Research and Development, 53(4);* 25-39.

FANG, Z. (1996). A Review of Research and Teacher Beliefs and Practices. *Educational Research, 38 (1);* 47-65.

FROUFE, S. (2000). Análisis crítico de las actitudes bloqueadoras de la comunicación humana. *Comunicar, 14;* 97-102.

GROVES, M. & ZEMEL, P. (2000). Instructional Technology Adoption in Higher Education: an Action Research Case Study. Internacional *Journal of Instructional Media, 27 (1);* 57-65.

HINOJO, J. & FERNÁNDEZ, F. (2002). Diseño de escala de actitudes para la formación del profesorado en tecnologías. *Comunicar, 19;* 120-125.

KAGAN, D.M. (1992). Implications of Research on Teacher Belief. *Educational Psychologist, 27(1);* 65-90.

LAWLESS, K. & PELLEGRINO, J. (2007). Professional Development in Integrating Technology into Teaching and Learning: Knowns, Unknowns, and Ways to Pursue Better Questions ans Answers. *Review of Educational Research, 77;* 575-614.

LUMPE, A.T.; HANEY, J.J. & CZERNIAK, C.M. (2000). Assessing Teachers' Beliefs about Their Science Teaching Context. *Journal of Research in Science Teaching, 37;* 275-292.

MCGRAIL, E. (2005). Teachers, Technology and Change: English Teachers' Perspectives. *Journal of Technology and Teacher Education, 13;* 5-24.

KOEHLER, M.J. & MISHRA, P. (2006). Technological Pedagogical Content Knowledge: A framework for Teacher Knowledge. *Teachers College Record, 108;* 1.017-1.054.

MOMINÓ, J.M.; SIGALES, C. & MENESES, J. (2008). *L'escola a la societat xarxa: Internet a l'Educació Primària i Secundària*. Barcelona: Ariel y UOC.

MUELLER, J.; WOOD, E.; WILLOUGHBY, T.; ROSS, C. & SPECHT, J. (2008). Identifying Discriminating Variables between Teachers who Fully Integrate Computers and Teachers with Limited Integration. *Computers & Education* (doi: 10.1016/j.compedu.2008.02.003) (01-07-2011).

NESPOR, J. (1987). The Role of Beliefs in the Practice of Teaching. *Journal of Curriculum Studies, 19;* 317-328.

PAJARES, M.F. (1992). Teachers' Beliefs and Educational Research: Cleaning up a Messy C Construct. *Review of Educational Research, 62;* 307-332.

PARASKEVA, F. & AL. (2007). Individual Characteristics and Computer Self-efficacy. *Computers & Education* (doi: 10.1016/j.compedu.20-06.10.006) (01-07-2011).

POZO, J.I. (2000). Concepciones de aprendizaje y cambio educativo. *Revista Ensayos y Experiencias, 33;* 4-13.

POZO, Y. & RODRIGO, M.J. (2001). Del cambio de contenido al cambio representacional en el conocimiento conceptual. *Infancia y Aprendizaje, 24 (4);* 3-22.

PUTNAM, R., & BORKO, H. (1997). Teacher Learning: Implications of New Views of Cognition. In BIDDLE, B.; GOOD, T. & GOODSON, I. (Eds.). *The International Handbook of Teachers and Teaching*. Dordrecht, The Netherlands: Kluwer; 1.223-1.296.

WOZNEY, L.; VENKATESH, V. & ABRAMI, P.C. (2006). Implementing Computer Technologies: Teachers' Perceptions and Practices. *Journal of Technology and Teacher Education, 14;* 120-173.

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Color in Child Spots: Chromatic Prevalence and Relation with the Brand Logo

El color en spots infantiles: Prevalencia cromática y relación con el logotipo de marca

ABSTRACT

Color is a crucial element in achieving effective and efficient communication. This article presents an analysis of the color elements used in TV ads aimed at children broadcast during November 2009 in Spain by the Disney Channel children's network which, according to Kantar Media, is the audience leader in open-to-air television programing. The convenience sample included the group of advertisers that Infoadex classifies as part of the «sports and leisure» sector, which includes products and services traditionally aimed at children, such as toys and leisure parks, as well as self-promotion ads for other television networks. The analysis quantifies the use of color in ads aimed at children and concludes that brands use color in very different ways. This study also examines the relationship between the color combinations chosen by advertisers in their ads and logos, confirming that the use of color combinations in ads and logos is arbitrary. Most advertisers who target children prefer to apply a range of colors to create contrast and highlight the product and its features and benefits, instead of strengthening the brand's corporate image. The study highlights the randomness in decision-making on the use of color.

ABSTRACT (Spanish)

El color es un elemento básico para la eficacia y la eficiencia comunicativa. Se realiza un análisis de contenido de los elementos de color en los spots dirigidos a niños emitidos en la cadena temática infantil Disney Channel, líder de audiencia de la televisión en abierto según Kantar Media, durante el mes de noviembre de 2009 en España. La selección de la muestra de conveniencia agrupó a los anunciantes considerados por Infoadex dentro del sector «deportes y tiempo libre» que comprende los productos y servicios tradicionalmente considerados infantiles, como juguetes y parques de ocio, además de la autopromoción de otras cadenas de televisión. El análisis cuantifica la prevalencia del uso del color en los anuncios televisivos dirigidos a la infancia y concluye que las marcas gestionan el color de forma muy diferenciada. Por otro lado, se estudia la relación entre la prevalencia cromática en el spot y en el logotipo del mismo anunciante. En este sentido, se comprueba un alto porcentaje de incoherencia en la prevalencia cromática en ambos formatos. La mayoría de los anunciantes del mercado infantil prefieren utilizar el color para provocar el contraste y resaltar el producto, sus características o bondades en detrimento de la coherencia en la imagen corporativa de la marca. El estudio realizado pone de manifiesto cierta arbitrariedad en la toma de decisiones sobre el color.

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1. Introduction

Television advertising is worth billions of dollars a year in the world's leading economies and is the focus of a wide range of investigative analyses. This research develops a descriptive study of the use of color in television ads aimed at children by closely examining the three key elements of television advertising, children, and color.

Television is still one of the most important and widely consumed media among children in Spain. According to the study by the Fundació Audiències de la Comunicació i la Cultura (Audience Communication and Culture Foundation) cited by Crescenzi (2010), television is the medium most frequently used by children, who watch it on an average of 2.4 hours per day. Toscano (2005) points out that television consumption increases to 3.7 hours a day on weekends. These television consumption levels explain the substantial investment in advertising in Spain, which in 2009 reached 2,368,200 euros[1]. Outside Spain, children in the United States watch more than 40,000 ads per year (Aysen & Kay, 2010).

2. State of the art review: research hypotheses and objectives

The complexity of color has been addressed by various disciplines, such as Physics, which studies the nature of light and color, its organization, perception and children's chromatic capacities, their flaws or chromatic pathologies (Julio et al., 1995). Other disciplines have approached the study of color from the point of view of the human eye's reception of signals and perception of color. In the study of signal reception there are common points of interest between Physics and advertising, which should be consistent with the physiological aspects. Other researchers have addressed the study of color based on the sensations it produces. Psychology has developed several theories that associate certain colors with sensations that occur in the human brain when perceiving color.

To consolidate the definition of children as consumers of TV ads we need to examine a number of psychological issues that clearly identify children as subjects in training. Any attempt to communicate persuasively should consider children's psychological characteristics and their reactions to the received message. However, this is not the main focus of our research, which examines the color of the product advertised and its attributes as an element that enhances the act of persuasion, according to Bringué (2001).

The relationship between color and communication is also important. The emergence of color television in the 1970s promoted the study of color in advertising and reinforced the power of the moving image. Color increased the reality and informative potential of television, rendering its images more attractive and expressive. The study of color as a communicative feature, in regard to its acceptance or rejection among young people, was undertaken by Del Olmo-Barbero (2006: 112-116), whose study based on 130 surveys of young people aged between 18 and 30 in the province of Madrid, concluded that, the most favored colors were blue, red and black, while the least agreeable were brown, yellow, dark grey and pink. Green was not among the favorites, but the survey results placed it fifth in the category of most desirable colors.

Color, as a significant element of the advertising discourse, has acquired an interesting role that has been investigated from different areas and disciplines. Degrado (2005: 1-9) has pointed out that advertising is introduced in our lives through color, among other things. If the form makes the first impact, color is essential to consolidate the attention and act on the emotional capacity of the individual.

Color defines and identifies the product, highlights it and provides information on its features and benefits. Color is also used as an extension of the tones of the product and as an extension of the advertiser's corporate image. However, according to Nó (1996: 13), we define the color through our perception of it; without it, color is just wavelengths rejected by different materials. On the other hand, Del Olmo (2006: 112-116) suggests that color is an excellent coding system. Used correctly, color infects emotional sensations and allows the generation of relationships of brand affiliation and loyalty. The use of color in advertising responds to a dual purpose. On the one hand, it has a phatic function of visual impact with aggressive colors, sharp contrasts, color reduction, harmony, visibility and readability. It can also play a significant role since colors work as symbolic, cultural, thermal, temperamental, sexual, ideological, elegant and pompous languages.

We must not forget that the advertising message incorporates a set of ideas that the advertiser wants to transmit to a previously defined audience in order to achieve the established objectives. The advertising message must be consistent with the content of the advertiser's communication strategy and, as a result, the previous creative processes should take into account the chromatic aspects involved in working documents such as the story board or story reel. The set of variables that must be assessed when planning an advertising strategy must include the advertiser's

corporate image and identity, in which colors play a really important role.

The advertisement must take into account the characteristics that are essential to achieve a communicative success. According to León (1996), color occupies the first place on the list of elements a message needs to achieve a communicative success. Other researchers have demonstrated how the position of the advertisement within the TV sequence, its duration and brand repetition highly influence the viewer's memory, but have also confirmed that the factors related to color, contextualization and music have a strong influence on brand recalling (Sáiz et al., 1999: 891-900). Indeed, there is a higher percentage of brand recall when the product is presented in a realistic context, when the music is attractive or when colors are alive.

The communicative functions of color, according to Tena Parera (2005: 151-159), include drawing and maintaining viewers' attention, and transmitting information and emotions. In addition, this use must meet some qualities with regards to its organisation: to keep the balance, highlight the dominant and regressive elements and to establish an orderly and complex hierarchy. Jiménez (2006) shows that children are extremely sensitive to stimuli such as music, color, animated characters or images that highlight the social success of the child through the consumption of the product. Bright colors and rapid action changes in a scene lead to consumption, causing in the receiver of the message the need to buy the offered products because they awake the mechanisms of persuasion, seduction and conviction (Hierro-Rincón, 2006: 63).

Children have special physiological, psychological and sociological features. They are a very dynamic target and are in constant evolution. The short duration of childhood, together with the different forms of behaviour, the changes in values, rules and parenting styles have resulted in different generations of children with desires, tastes and needs that evolve as they grow and mature, and which are also affected by the chan-

ges and continuous innovations that occur in the field of technology (Tur & Ramos, 2008: 169-170). Other studies on the use of color in advertising have been developed by Pitchford and Mullen (2001), who have demonstrated the difficulty of studying the meanings suggested by color in children. Scholars have also analysed the effects of print advertising's dominant colors in the emotions of adult subjects and the attitudes generated towards the advertisement (Lichtle, 2007). The relationship between the high use of color and the attitude towards the advertisement (arousal

> The advertising message incorporates a set of ideas that the advertiser wants to transmit to a previously defined audience in order to achieve the established objectives. The advertising message must be consistent with the content of the advertiser's communication strategy and, as a result, the previous creative processes should take into account the chromatic aspects involved in working documents such as the story board or story reel. The set of variables that must be assessed when planning an advertising strategy must include the advertiser's corporate image and identity, in which colors play a really important role.

level and preference) has been addressed by Gorn and others (1997).

One of the few studies on color and advertising in Spain has been conducted by López and Monserrat (2009), who show that the use of the corporate identity and, in particular, of color is intentional and is subject to the corporate communication strategies defined by the sector of fast-food franchises. The authors examine the cultural meanings associated with colors.

Research on the impact of outdoors advertising has defined the concept of «visual neuromarketing» as a science that uses tools to discover how certain parts of the brain react to an advertising stimulus, with the aim of predicting consumer behaviour and developing more effective impact strategies; by enhancing the visual effect of advertising through the mixing colors, visual perceptions, and impact of sizes and perspecti-

ves (Vera, 2010: 155-174). In this regard and as previous steps for a posterior analysis that leads to a coherent decision-making process, it is a priority to objectively quantify and inventory the use of color in advertising. This is the ultimate goal of our approach.

This research is guided by three hypotheses: 1) Each advertiser uses a preferred color combination; 2) There are dominant color combinations in advertising targeting children; 3) The use of color in TV advertisements corresponds to the main color ranges used in the brand's logo. The objective of this research is to perform an objective measurement of color that allows describing its use in audiovisual advertising aimed at children and to compare it with the use of color in the logo of each advertiser.

3. Materials and methodology

Different techniques were used to undertake this research. Firstly, a literature review was conducted to build the theoretical framework. This was followed by a content analysis of a sample of TV advertisements. Finally, the obtained data was processed and analysed.

With regards to the literature review, it included primary and secondary bibliographic sources and periodicals in order to establish the latest theoretical and empirical advances in the subject under study and to define the significant communication variables in relation to the use of color in TV advertising in Spain.

The research team firstly reviewed the selected ads as a whole and later analysed them through screenshots taken every five seconds (zero, five, ten, fifteen and twenty seconds to be precise). Thus, five screenshots of the each ad, which lasted about 20 seconds, were examined. Then the most appropriate color measurement system was identified. The research team tested several video editing programs such as Final Cut Pro and noticed that while they showed a color map, they did not quantify each color separately, and only provided an overview of the color range and dynamics of values in the histogram.

The program called Matlab has been used as a validated system in research on artificial vision and image processing. Matlab's function is to automatically divide the different color regions in black and white images, which results in an image in which the color regions are labelled with the percentage in which each color appears. This program was chosen to perform the objective measure of color in the sample of ads.

To carry out the study it was necessary to create a database of color images to train, test and validate the system created for the identification of the different

colors. This database consisted of the original images selected from each of the analysed ads. The ads' screenshots were selected with the program called «MPEG Streamclip» Video Converter for Mac OS X (version 1.9.1.)[2] and captured with the program called «Instantánea»[3] for Mac OS X.

After the database of color images was created, Matlab[4] was used to identify the different colors. The design of the different algorithms was based on different RGB color spaces. Thus, each color under study was defined through a series of parameters that included different tonal variants of each color.

The system was programmed and tested so that once implemented it could provide efficient and effective results. An inventory of the predominant color elements in the sample of commercials was developed. To be precise, the variable that defines the predominant concept is obtained from the result achieved for each color that was defined and confined by the researchers, applied in each case to the analysis made with Matlab. The research team established a variable for each color to develop the inventory in each of the selected screenshots, which are treated as temporary spaces. Afterwards, Matlab was used to determine the presence of each color in percentage terms, as well as a graphic image of each analysis and the black and white images that graphically indicate the color under analysis. The data analysis included all the images selected from the commercials. A top ten ranking was created for the use of each color in the temporary spaces taken in the 0, 5, 10, 15 and 20 second marks.

3.1. Sample Design

The selection of the convenience sample grouped all advertisers considered by «Infoadex» as part of the «sports and leisure» sector, which comprises 15 advertisers of products and services traditionally considered as targeting children, such as toys, toys retailers and leisure parks, as well as self-promotion ads of other television networks. The total number of ads analysed is 184. The children-aimed Disney Channel network was chosen because Kantar Media identified it as the leader of open-to-air television audience during November 2009 in Spain. In November there is a great advertising investment in the children's market because it is close to the Christmas campaign.

Table 1 shows the privileged position occupied by Disney Channel in comparison to other theme channels targeting young audiences[5].

4. Results

More than 5,500 data and image elements were

analysed. To be precise, the use of six colors was examined in 184 TV ads divided into five temporary spaces, i.e. screenshots taken in the 0, 5, 10, 15 and 20 second marks of the ads.

The analysis firstly provides data on the dominant colors in each advertiser and the total sample of ads. Then it focuses on the color composition of each advertiser's logo, and compares it with the use of color in their TV ads.

Thus, the advertiser that uses red in their ads the most is Cuatro (98%). This advertiser is followed by Bizak and Famosa, whose use of red color slightly exceed 80%. Finally Bandai and Giro slightly surpass 60%.

Regarding the use of green color in TV ads, Giochi Preziosi stands out with almost 70%. This advertiser is followed by IMC and Mega Bloks (65%-60%). Finally, the use of green by Playmobil, Cefa Toys and Bizak ranges from 50% and 60%.

The blue color is used to a greater extent by IMC, in about 78%, followed by Bandai with 61% and Bizak which uses blue at different percentages that oscillate
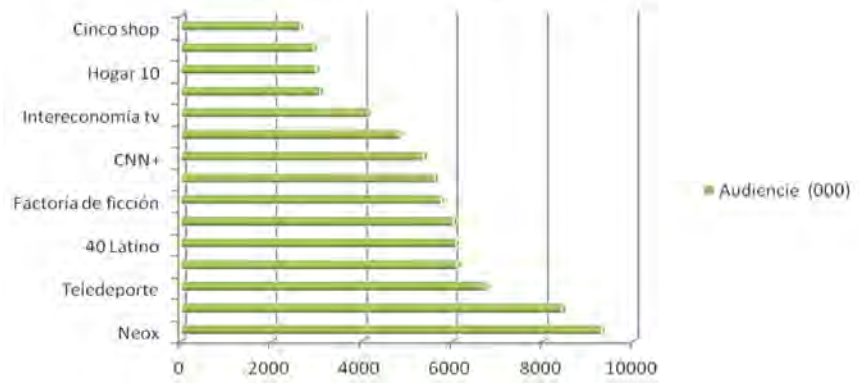
Table 1: Audience of theme channels.

between 60% and 52%, according to the analysis of their ads.

The use of the yellow color is dominant in the ads by Giro, with a presence of 76%, followed closely by Mattel with 74%. The presence of yellow in ads by Bizak and Simba ranges between 60 and 70%. Finally, the use of yellow by Famosa and Zapf Creation ranges between 50% and 60%.

With regards to the use of the black color, Hasbro occupies the first place with 97%. Playmobil also stands out for its use of black in its ads with 94%, followed closely by Bandai (92%) and Cefa Toys (90%), and no so closely by Giochi Preziosi with 86%.

The white color is used by Nintendo DS in 97%, which is followed by Simba with 90%, El Corte Inglés and Playmobil with percentages between 88% and 90%. Other advertisers that stand out for the dominant use of white in their ads are Bandai and My Little Pony with percentages between 86% and 88%. The comparison between the use of the previous colors in the TV ads and the presence of these colors in advertisers' logos provides interesting data that deserve to be highlighted.

Firstly, Bandai's logo has white letters over a red back-

Table 2: Number and types of ads from the sports and leisure sector on Disney Channel.

ground, but Bandai's use of red in its ads is in seventh place in comparison to the other advertisers, with a percentage slightly over 60%. Bandai's use of the color white, which is also present in its logo, is in eighth place with 87%.

Bizak's logo also has white letters on a red background. Bizak's use of red in its ads ranked fifth in comparison to other advertisers that use red the most, and did not ranked in the use of the color white.

Cefa Toys' logo has different colors, such as green, red, blue, white and yellow, and is by far the most colorful. However, Cefa Toys' use of black in its ads is outstanding, despite this color is not present in its logo. Cuatro has two versions of its logo. One version has red over white and the other white over a red background. The first logo stands out in its use of the color red in its ads. Famosa's logo uses a blue typography over a white background. However, Famosa's use of blue or white in ads is not dominant. Famosa only stands out in the predominant use of red, in 80% of the ad. The logo of Giro Toys and Games uses blue and red over a white background, however, the predominant color in its ads is yellow (74%).

Giochi Preziosi's logo has a clear predominance of green, and uses white and black to a lesser extent. Giochi Preziosi is the advertiser that uses green the most (78%), and also one of the advertisers that uses black most significantly (86%). Hasbro, like Giochi Preziosi, stands out for the dominant use of green in its logo. However, the analysis shows that it is the leader in the use of black in TV ads, with 97%.

El Corte Inglés has a logo that uses white over a green background, but its TV ads occupy the fourth place in the use of white (89%).

Simba's logo uses red letters and white and green elements, but the predominant colors in Simba's ads are white (90%) and yellow (59%). The colors white, red and green also appear in IMC's logo, but the predominant colors in IMC's ads are blue (78%) and green (67%). Mega Bloks' logo uses red letters with white edges over a blue background. However, the predominant color in Mega Bloks' ads is green, which puts it in the fifth place among the sample of advertisers. My Little Pony's logo has two versions, but both of them use white (67.5%) and red (32.3%). However, My Little Pony occupies the ninth place in the use of white in TV ads, and almost always as a background color. The logo of Nintendo DS is predominantly white (94%) and uses black typography (4.7%). Regarding the use of these colors in the ads, Nintendo DS occupies the first place in the use of white, with 97%. Playmobil's logo is colored blue

(with 89.6%) and white (10.4%). However, Playmobil's ads stand out for the predominant use of black, which occupies the second place in comparison to other advertisers with nearly 94%. The logo of Simba (MB and SMB) is colored white in 82% and red in 11.7%. According to the analysis, Simba is the third advertiser that uses white the most in its TV ads (in 89%).

When compared to the other advertisers, Educa, ActiVision, Lego, Meccano, Fisher Price, Parker, Planet 51, Rescue Pals, nor Zapf Creation stand out for the predominant use of any of the analysed colors in their ads. With regards to their logos, Educa uses black, red, yellow and white. Meanwhile, ActiVision's logo has black letters over a white background. LEGO's logo has red, white and black colors. Meccano's logo has red letters over a white background. Fisher Price's logo has white letters over a red background but the use of these colors is not predominant in ads. Parker predominantly uses black and white in its logo but not in its ads. Planet 51 uses white (63%) and green (23.4%) in its logo, but does not use any of these colors predominantly in its TV ads. Rescue Pals uses a white background and yellow, green and black in its logo, but does not use any of these colors predominantly in its ads. Zapf Creation uses white (98.9%) and red (1.9%) in its logo, but does not use any of these colors predominantly in its ads.

By examining the predominant colors in the whole sample of ads we can identify the following dominant percentages: black 22.71%, green 20.72%, white 16.75%, red 14.55%, yellow 11.54% and blue 8.82%.

The following table presents the results of this research on the use of color by advertisers, by comparing the colors used in the logo and the TV ads.

5. Conclusion

Color can be an element of communicative efficiency if it is used in optimal conditions of vision and is managed communicatively in the right way. Otherwise, color will become a mere decorative element.

Advertisers that use one color dominantly exhibit a percentage of use comparatively unequal according to the advertised product, which indicates certain arbitrariness. Thus, we can affirm that the first hypothesis has been proved: each advertiser uses a preferred combination of colors. It can be inferred that this practice demonstrates that advertisers take into account the differential position of their brands and take strategic decisions in relation to the use of color.

The second hypothesis, which proposed the existence of dominant color combinations in advertising

targeting children, has been also demonstrated. The most widely used color is black, although its use secondary, as background. Green is the color mostly used in the main elements of the ads, with a percentage of 20.72%, and red is the third most used color. The use of blue occupies the last place behind yellow. However, the percentages achieved by each color do not indicate significant differences. The analysis did not detect a dominance of pink or blue, which are colors culturally associated with children's products.

Regarding the third and last hypothesis, the comparison between the brands' logos and TV ads has confirmed that advertisers do not take coherent decisions in relation to the use of color. Thus, a brand can use different color combinations in its logo and its TV ads. The majority of advertisers targeting children use color to create contrast and highlight the product, its features or benefits at the expense of the consistency in the brand's corporate image. However, the approach of this descriptive research has not confirmed these aspects, which could motivate a future line of study.

The study proves that the advertisers Cuatro and Giochi Preziosi use colors with certain consistency in their logos and TV ads. Regarding the use of the color white in logos, it serves as background for most advertisers. The color white only provides contrast to another color that is aimed to identify the advertiser and is placed on the foreground of the logo. The analysis neither detected coherence between the use of the logo's main color (apart from white) and the dominant color used in the TV ads of each advertiser, except in the cases described above.

Therefore, it must be pointed out that the third hypothesis is demonstrated: a brand's use of color in TV advertising does not correspond to the main color combinations used in its logo.

We have identified certain limitations in the research. It would have been interesting to incorporate some type of measurement or analysis of children's color processing, reception and preferences. It would have been also useful to investigate the views of the sample of advertisers on the strategic decision-making on the use of color and the intentions behind it.

Advertiser	Code	Logo's main color	Logo's secondary color	Ranking of red	Ranking of green	Ranking of Blue	Ranking of yellow	Ranking of black	Ranking of white
Acitivisión black	CTV	Black	White	x	X	x	X	x	x
Activisión White	CTV	White	Black	x	X	x	X	x	x
Bandai	BND	Red	White	7th/8th/10th	X	2nd	X	6th/7th	8th
Bizak	BZK	Red	White	5th	10th	3rd/4th/5th/6th/7th/8th/9th/10th	3rd/8th/9th/10th	X	x
Cefa Toys	CF	White	Various	X	9th	X	x	8th	x
Cuatro	CTR	Red	White	1st/2nd/3rd/4th	x	x	X	X	x
Educa	DC	White	Red	x	x	x	X	X	x
El Corte Inglés	LCR	White	Green	x	x	x	X	X	4th
Famosa	FMS	White	Blue	6th	x	x	6th	X	x
Fisher Price	FSH	White	Red	x	x	x	X	X	x
Giochi Preziosi	GCH	White	Green	x	1st/2nd/7th	x	X	10th	x
Giro	GR	White	Blue	9th	x	x	1st/4th	X	x
Hasbro	HSB	Green	Blue	x	x	x	x	1st/9th	x
IMC	MC	White	Yellow	x	3rd/4th/6th	1st	x	X	x
Lego	LG	Red	White	x	x	x	x	X	x
Mattel	MTT	Red	White	x	x	x	2nd	X	x
Meccano	MCC	White	Red	x	x	x	x	X	x
Mega Bloks	MGB	Blue	Green	x	5th	x	x	X	x
My Little Pony 1	MPQ	White	Red	x	x	x	x	X	9th
My Little Pony 2	MPQ	White	Red	x	x	x	x	X	9th
Nintendo DS	NNT	White	Black	x	x	x	x	X	1st/2nd/10th
Parker	PRK	White	Black	x	x	x	x	X	x
Planet 51	PLN	White	Green	x	x	x	x	X	x
Playmobil	PLY	White	Blue	x	x	x	x	2nd/3rd/4th/5th	5th/6th/7th
Rescue Pals	RSC	White	Yellow	x	x	x	x	X	x
Simba	MB	White	Red	x	x	x	5th	X	3rd
Simba	SMB	White	Red	x	x	x	x	X	3rd
Zapf Creation	ZPF	White	Red	x	x	x	7th	X	x

Table 3: Use of color by advertisers: comparison between logos and TV ads.

In relation to the possible future lines of research, we understand that the quantification of color and its comparative study could be extended to other media and platforms in addition to television and brand visual identity. Another line to be considered could include the use of color in texts created for communication and education purposes, either in written or audiovisual form.

Notes

[1] Media advertising investment reached 12,699.4 million euros in 2009 and 14,915.7 million in 2008. (www.infoadex.es/estudios/resumen2010.pdf).

[2] Matlab's official website (www.mathworks.es).

[3] Theme channels targeting children in open-to-air television: Boomerang, Clan TV, Disney Channel and Disney XD.

[4] Prior to the analogue switch-off dates.

[5] Determination based on the obtained audience data.

References

AYSEN, B. & KAY, M. (2010). How Are Children's Attitudes Toward ads and Brands Affected by Gender-Related Content in Advertising? *Journal of Advertising, 39, 1;* 35-48.

BRINGUÉ, X. (2001). Publicidad infantil y estrategia persuasiva: un análisis de contenido. *Zer, 10;* 107-129.

CRESCENZI, L. (2010). La comprensión del niño telespectador: posibilidades y límites asociados a la edad. *Zer, 15, 29;* 69-88.

DEGRADO, M.D. (2005). Televisión, publicidad y comunicación. *Comunicar, 25;* 1-9.

DEL OLMO, J. (2006). El color como elemento comunicacional. *Comunicar, 26;* 112-116.

GORN, G.J.; CHATTOPADHYAY, A. & DAHL, D.W. (1997). Effects of Colour as an Executional Cue in Advertising: They're in the Shade. *Management Science, 43, 10;* 1387-1400.

HIERRO RINCÓN, M. L. DEL (1996). Los niños y niñas ante la elección de juguetes. *Estudios sobre Consumo, 37;* 53-71.

JIMÉNEZ, M. (2006). Cuando Barbie se come a Garfield. Publicidad y alimentación: niños obesos buscando la perfección del cuerpo adulto. *Trastornos de la Conducta Alimentaria, 3;* 245-263.

JULIO, J.A. & AL. (1995). Desarrollo madurativo, percepción del color y respuestas. *Anales de Psicología, 11, 2;* 165-173.

LEÓN, J.L. (1996). *Los efectos de la publicidad.* Barcelona: Ariel.

LICHTLE, M.C. (2007). The Effect of an Advertisement's Colour on Emotions Evoked by an ad and Attitude towards the ad - The Moderating Role of the Optimal Stimulation Level. International *Journal of Advertising, 26, 1;* 37-62.

LÓPEZ RAMÓN, J.A. & MONSERRAT-GAUCHI, J. (2009). Estrategias de comunicación corporativa en las franquicias de restauración. Análisis cromático de la identidad visual corporativa. *Revista Latina de Comunicación Social, 64;* 300-314.

NÓ, J. (1996). *Color y comunicación.* Salamanca: Universidad Pontificia de Salamanca.

PITCHFORD, N.J. & MULLEN, K.T. (2001). Conceptualization of Perceptual Attributes: A special Case for Color? *Journal of Experimental Child Psychology, 80, 3;* 289-314.

SÁIZ, D.; BAQUÉS J. & SÁIZ, M. (1999). Factores que pueden mejorar la codificación de los mensajes publicitarios: ¿una cuestión de memoria implícita o de memoria explícita? *Psicothema, 11, 4;* 891-900.

TENA, D. (2005). *Diseño gráfico y comunicación.* Madrid: Pearson Educación.

TOSCANO, M.O. (2005). Orientación hacia el consumo abusivo de televisión en la infancia. *Comunicar, 25, 2;* 4.

TUR, V. & RAMOS, I. (2008). *Marketing y niños.* Madrid: ESIC.

VERA, C. (2010). Generación de impacto en la publicidad exterior a través del uso de los principios del neuromarketing visual. *Telos, 12 (2);* 155-174.

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Representation of Childhood in Advertising Discourse in Chile

Representación de la infancia en el discurso publicitario en Chile

ABSTRACT

This paper discusses the main characteristics of advertising discourse in relation to childhood and its engagement with children's view of this stage of life, in line with «new social studies» and critical discourse analysis. This discussion seeks to complement the functionalist perspective of communication studies in the field of advertising content analysis by incorporating a discursive focus, taking into account contextual issues that may condition the interpretation of messages. Firstly, discourse analysis was used as a means of exploring social representations, identifying stereotypes employed in children's advertising in order to establish the possible functions of the message. To contrast these findings, group interviews were conducted with 10 and 11 year-old boys and girls from middle-income families in Santiago, Chile. A comparison of both findings reveals a complex and relational notion of childhood. Children see themselves as burdened by parents, and adulthood as an effective lack of liberty, where the archetypes reveal an image of the adult world as a state of loss with respect to the exercise of creativity, imagination and freedom. These archetypes correlate to children's television output, where a number of shows ridicule the image of adults through irony and parody, presenting them as incompetent in their roles as parents and in their moral authority.

ABSTRACT (Spanish)

El artículo analiza las principales características que presenta el discurso de la publicidad respecto de la infancia, y su relación con la perspectiva que los niños tienen de esta etapa de la vida, tomado como referencia los «nuevos estudios sociales» y el análisis crítico de discursos. Con esto, se busca complementar la perspectiva funcionalista de los estudios de comunicación en el ámbito del análisis de contenido, incorporando un enfoque discursivo que considere los aspectos contextuales, que puedan condicionar la interpretación de los mensajes publicitarios. El método utilizado, en una primera etapa, fue el análisis de discurso aplicado a la publicidad infantil, donde se establecieron las funciones posibles del mensaje, con el objetivo de explorar las representaciones sociales e identificar los estereotipos utilizados para generar estos spots publicitarios. En una segunda etapa, y para contrastar los hallazgos obtenidos, se realizaron entrevistas grupales a niños y niñas de estrato socio-económico medio de 10 y 11 años, de la ciudad de Santiago de Chile. Al confrontar ambos resultados, se destaca una noción compleja y relacional de infancia. Una visión de sí mismos como niños agobiados por los adultos y de la adultez como ausencia de libertad efectiva, y donde los arquetipos identificados hablan de una imagen del mundo adulto como condición de pérdida respecto del ejercicio de la creatividad, la imaginación y la libertad. Estos arquetipos tienen su correlato en la oferta televisiva infantil, donde en buena parte de sus series, la imagen del adulto es ridiculizada a través de la ironía y la parodia, mostrándolos como poco competentes en sus roles de padres y en su autoridad moral.

KEYWORDS

Advertising, childhood, consumption, discourse analysis, media, media television, social representations.
Publicidad, infancia, consumo, análisis de discurso, medios, comunicación, televisión, representaciones sociales.

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1. Introduction

This paper discusses some characteristics of television advertising discourse in relation to childhood. These characteristics will be contrasted in the final discussion with children's view of this stage of life. While the representation of childhood in advertising can be understood as a reflection of societal discourse on this stage, and the role assigned to child and adult from a discursive perspective, important questions are raised about its influence on the construction of the same social discourse from a child's perspective. This representation seeks to complement advertising discourse studies that follow the paradigm of the influence of advertising, where childhood is seen as a vulnerable state in which the child fails to become a full subject of interpretation (Fernández, 2006; Bringué, 2001; Young, 1990). By contrast, from a discursive perspective the process that occurs between the production and interpretation of the message is not linear, but rather is built on contextual aspects of the interpretation of messages (Vergara & Chávez, 2010).

This discussion is of particular importance considering children's high exposure to television advertising, the place it occupies in their daily lives and, therefore, the prompt assimilation of minors into the logic of consumption. This prominence has raised concerns in different quarters about the possible effects of television advertising on a young audience. As Perales and Pérez-Chica (2008) point out, the scientific literature in relation to childhood presents a general consensus on the role of media in three areas: the role played in the acquisition of knowledge, values, attitudes and patterns of behavior; the way in which this influence is concurrent on the cognitive, attitudinal and factual level; and its presence in the formation of stereotypes, identity guidelines and, therefore, in the production of meaning. Advertising in particular has been the subject of constant preoccupation, expressed through widespread international regulation of advertising aimed at children (Ferrer, 2007).

2. Conceptual framework

Childhood has emerged as a specific study topic in the field of «new social studies». The so-called «conceptual autonomy of children» elevates childhood to an object of study in its own right rather than a secondary component of family environment, education, public policy or other sectors (Prout, 2001). This does not imply its study in isolation, but rather a conceptual autonomy that allows a better understanding of the inclusion of children in institutional settings, and ongoing relationship with socio-historical changes and gender, class, ethnicity and other areas. These studies have, in parallel, begun to explain moral, cognitive and social competence in children, contradicting traditional research based on rigid methodologies and disabling assumptions on childhood (Mayall, 2001; Christensen & James, 2000; Greene & Hill, 2005; Woodhead & Faulkner, 2000).

In this light, how children face the world around them, determined increasingly by new skills and cultural values associated with consumption, is of particular importance. We find generations who, in consequence, construct their subjectivity on new bases, increasingly defined by images issuing from the media (Vergara & Vergara, 2008). In this regard, advertising is a substantial part of the social construct in the sense that it projects an image of society, the creation of meanings and patterns of behavior. Thus, the reception of advertising and its relation to the perception of social reality, is a process of cultural formation where knowledge of reality is structured to guide, understand and participate in daily interactions (Belmonte & Guillamon, 2005). Advertising, then, delivers models, new meanings, values, behavior patterns and ways of thinking and interpreting reality (Catalán, 1982; Lomas, 2001; Vergara & Rodriguez, 2010). In this context, the question of children's advertising discourse, and the mediation of children as subjects of action and interpretation, becomes particularly relevant.

In the case of Chile, two factors should be taken into account when approaching children's advertising. First, the role of television as a mainstay of traditional media advertising, which in 2010 reached 48.2% of the total investment in the case of broadcast television, and 3,9% in cable (ACHAP, 2010). Second, according to data released by the National Television Council (CNTV, 2008, 2010), the penetration of pay-TV reached 43,3%, significantly increasing children's television output through niche channels aimed at this segment, thus becoming an important media platform for advertising to children. In the case of broadcast television, programming targeted to boys and girls aged 6 to 12 years reached 12% of the general programming offering in all-ages segments. The percentage of advertising accounted for 22% of the totality of programming for this segment, translating to approximately thirteen minutes of advertising per hour of programming. Finally, regarding the distribution of children's offerings by sector, the highest concentration was seen in «Toys and Entertainment», followed by «Food», with 39.9% and 22.8% respectively.

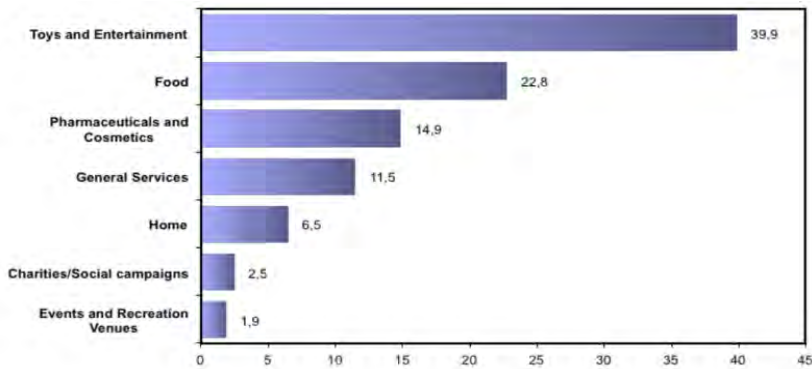As Uribe (2005) notes, the increased output of children's products and television content has resulted

Figure 1. Television advertising for Boys and Girls (6-12), by sector. Year 2010
Source: CNTV, Advertisement in adolescent and children's programming, 2010.

Speech acts, considers an important part of the communication processes to be located at the level of connotation; in other words, that which is not explicit, but implicit. Hence, the ways through which meaning is given to the implicit are not relegated to encoding and decoding, but correspond to networks of meaning and logics of interpretation that reveal cognitive strategies. These strategies operate, in turn, as «common sense», enabling meanings and interpretations broadly in line within the same socio-cultural context; in other words, the connotative dimension of the messages. One of the key aspects through which logics of meaning in children's advertising can be identified is through the characterization of stereotypes, defined as the use of images, messages and social roles associated with products belonging to the collective imagination, and which are consciously simplified for quick and easy reception (Sánchez-Aranda, 2002).

As Bardin (1986: 23) points out, in this type of analysis there are no ready-made templates, only basic patterns that are in general difficult to transfer. This complexity explains why methodological approaches to advertising copy can vary significantly, both in terms of theoretical perspectives as in their stated objectives (Capdevila & Fernández, 2006: 176). Considering all this, we chose to design a grid for the analysis that would help identify, from an interpretive perspective, the discourses of advertising to children on the basis of the main stereotypes in use. These received a subjective grading on a scale of 10 to 100 to determine their place within the discourse of advertising[4]. Due to its qualitative character, this grid did not work with a representative base of a determined universe; rather, it expanded on the meaning of the messages[5]. Thus, the validity of the analysis is, in accordance with Krippendorff (1990: 230), of an external kind in the

in substantial changes in how advertising represents childhood, delivering a proposal and vision with respect to it. One aspect of this is the economic empowerment of children in their consumption decisions. According to relevant studies conducted since 2003 by CNTV, McCann-Erickson and Research Chile (2003), children between 8 and 13 were able to decide, discriminate and influence purchase decisions, a reality incorporated by parents as part of the education expected for a child of that age. In parallel, school was the main area of consumption for this age segment, reflected in that 78% claimed to regularly receive money from their parents for this purpose. This money was destined primarily to satisfy food needs through snacks[2]. Interestingly, this type of consumption occurs across the board in all socioeconomic groups.

3. Methodology

If we consider that children's television advertising disseminates not only content, but also establishes a relationship with its audience through the representation of imaginary meanings, behaviors, and mediations through the product, its study should shift from content analysis to discourse analysis. In this sense, a discourse is determined by production conditions and a linguistic system (Bardin, 1986: 168-169). The analysis of children's advertising, then, seeks to establish the possible functions of message on a connotative, contextual and relational level in order to explore their social representations. Amigo (2007) postulates that discourse analysis, stemming both from the development of Pragmatic Linguistics and the Theory of

Expenditures	Socioeconomic group (3)				
	BC1 (High)	C2 (Middle)	C3 (Lower-middle)	D (Low)	Total
Food items (*)	82%	88%	89%	91%	89%
School supplies	28%	22%	23%	14%	20%
Travel expenses	11%	4%	6%	5%	6%

Table 1. What do you buy with the money you receive?
(*) Cookies, snacks, juices, sweets, caramels, soft drinks, chocolates and snack bars. Source: CNTV (2003).

sense that the results effectively reflect real phenomena sensitive to context, and where, rather than measuring, the intention is to capture the richness and complexity of advertising copy.

The selection of the test sample was of an intentional type[6]. For this purpose, we defined a sample of commercials that met two criteria: being directed at boys and girls aged 6 to 12 years, and that promoted the consumption of food (snacks). These criteria were adopted due to the percentage of children's advertising devoted to this sector (see figure 1), and the consumption of snacks in this segment (see table 1).

4. Presentation of results

The first thing we note in the analyzed commercials are the different forms taken on by the relation between fantasy and reality in one discourse, with a marked role of men in terms of gender. In this context, we have identified four stereotypes associated directly with children and their environment, consisting mainly of parents and peers. First, in relation to their peers, is the image of the boy, which manifests in two poles: on the one hand, and with greater prominence, the stereotype that we have termed the clever/erotized boy, in which he expresses the role of male conqueror with respect to adult women; on the other hand, the representation that has been termed good/responsible boy, who, although never shown explicitly, is invited to play a critical role in unjust situations. Secondly, the adult is presented in two polarities of equal prominence: the stereotype of the Ridiculed Adult with respect to their role, primarily as a father-mother and husband-wife; and the Ridiculed Adult in its moralizing, the child «must be» variant. A common element of these polarities is the role assigned to the presence of the child: the ability to summarize and resolve inconsistencies of the world and of adult discourse.

This is seen in the analysis of Costa cereal commercials, where a central character named «Monkey», a rag doll who assumes an adult role, goes to a massage parlor to be attended by a model. His attitude is that of an adult-child who seeks, disingenuously, to be caressed sensually by the woman, thus showing that he is a man of success as he eats the cereal bar. Interestingly, when the woman calls a male masseur to continue the job, the character leaves the stretcher stating that he feels fine. In this manner, the pleasure the woman's massage causes is presented alongside the

flavour of the cereal bar, transforming both pleasures into one sensory experience. In this context, the product acts as a mediator of the existence and validation of these feelings as acceptable for the child. In a second commercial of the same brand, the same character appears in a family kitchen with two children, assuming the position of an adult through a moralizing discourse about the importance of sharing, a value he himself is not willing to practice with their cereal, thus ridiculing the moral discourse of the adult world. Here again, the relationship of the product with the child demonstrates the ability to assess adult discourse as a formalism without relation to reality, in which the individual takes precedence over solidarity with others.

In the case of Nestlé chocolate commercials, the two featured characters are young Chilean children's television stars who invite children to be photographed next to the chocolate, and present positive demands through a printed ad: how to care for animals, the environment, or rejection of «bullying», all this with the aim of encouraging viewers to participate in a contest for invitations to a music concert. This space of revolt against certain practices (the slogan being: Trencito
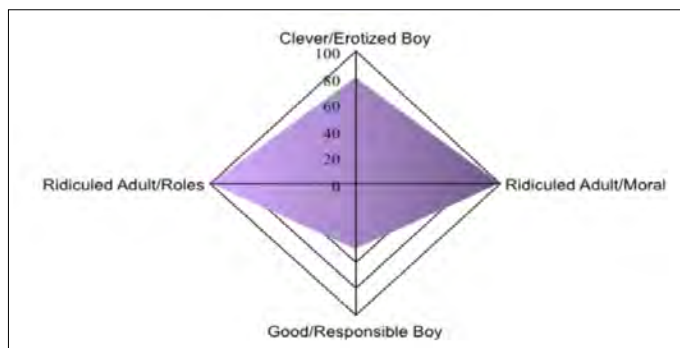
chocolate became a rebel), is confined to an expression of intent and the possibility of winning a contest, removing true protagonism of the children with regard to their stated demands. Thus, their claims do not generate a real impact, but rather are merely stated, which appears to suffice in place of the realization in practice or action.

Finally, in the Bilz & Pap soft drink commercials, the central theme is the constant combination of elements of reality with fiction, ridiculing adults in their roles and naïveté with respect to the confusing situations and daily gags created by the children. In one commercial, this occurs through the confusion caused by the arrival of an alleged boyfriend of the grandmother, who happens to be a cat, which disrupts the family. In another commercial of the same beverage, a

son with many twin brothers causes a similar confusion for the parents. Although in both cases the children manage to make fun of the adults in the home, and obtain recognition as the smartest in the eyes of their peers, it is worth noting that they emerge as articulators of the dynamics and sociability of the family. Without their presence and ability to reveal the potential inadequacy and ridiculous nature of the adult world, family life is presented as devoid of all routine and playful dimension.

In discursive terms, it is interesting that note that there is no sign of the existence of a relationship with the adult world itself, but rather a proposal of reality built from within the child's world, where everyday life is infused with fantasy elements. In this proposal, irreverent criticism of the adult world comes in two dimensions: ridicule of adults in their roles and moral discourse. This irreverence towards adulthood becomes the space where the stereotype of the masculine clever-child is structured, which takes advantage of the incompetence and stupidity of adults to demonstrate primacy among his peers. The child-adult manipulates situations, seizes the moment, works only for himself, and finally uses his status as a child to escape difficult situations without having to answer for his actions.

The archetype of the clever-child, prominent in the commercials we have analyzed, has its counterpart in children's television output, which is built to a large degree on characters with these features. As an example, we can cite two representative cases. One is the children's series The Simpsons, which shows a family immersed in daily life and irony. Both the aesthetics and the situations presented are based on excess and sarcasm about the reality and discursive elements of television. The father of the family seems more concerned with himself than his children, and the mother is portrayed as distracted and without depth. Despite their antics, the children of the family often seem more reasonable than their parents, and must play a significant role in solving the problems their parents tend to generate. The other case is the children's series The Fairly OddParents, in which the main character is a 10 year old boy who lives with both parents who pay little attention, leaving him in charge of a selfish and uncaring young nanny. However, the chilld has the support of two fairy godparents with magical powers, who grant wishes that tend to solve his problems. Despite the tragic nature of the story, the series is presented in ironic and sarcastic language, its characters not necessarily good or bad, but rather morally weak and selfish, or kind-hearted, once they repent.

This media context is aligned with the advertising discourse we have analyzed, having endowed its characters with the attitudes of the protagonists of the series mentioned above. In a world wrecked by the incompetence of adults, a personal narrative is valued, with a discourse geared to the child's recognition by his peers, and portrayal of children as successful, superior to their parents, and equipped with the necessary skills to break the rules of the adult world, thus achieving what they seek, which is generally their own pleasure. Along with this archetype a second, less pronounced discursive role is that of the good and responsible child, dedicated to just causes. This does not achieve the success of the stereotype of the child-adult, however; his role is limited to a concern that is rewarded with the possibility of a promotional prize. Here there is no cunning or ingenuity as in the previous case, only passivity after reporting a just cause. No more is expected of him, there is no role other than to wait for a possible prize, and the question of what will happen to his demands is not asked. In short, he can't be considered a responsible person.

In the above analysis, childhood is seen as a state separate from the adult world, in which the child is encouraged to act according to his desire and personal benefit. However, no instances of mediation and relationship with the adult world materialize. In this sense, childhood is seen as the possibility of enjoying a relationship devoid of responsibility for the immediate environment.

5. Discussion

The results presented in the previous section pose the following questions about the meaning and uses of advertising to children: To what extent do these representations influence those of boys and girls with respect to childhood?; how are the stereotypes we have identified used and socialized? Confronting these results with the perspective of children with respect to childhood, it is possible to establish some relations between the two discourses. According to recent, non-directive group interviews[7] with children of 10 and 11 years of middle socioeconomic status, both in mixed contexts and single sex, a sometimes desolate image of adulthood is revealed, presented as a state of loss in which, due to life circumstances, the exercise of imagination, creativity and freedom itself becomes impossible. At other times, the use of irony, and outright parody, seems to help these children to forgive the fragile, hesitant and irrational character of adults. In this context, the image of adults is ridiculed in a similar manner to that found in advertising discourse, revealing their lack of competence in their roles as parents

and teachers, thus disqualifying their moral authority.

The origin of this coincidence is worth pondering: Is advertising understanding certain discursive phenomena present in children and magnifying them to serve its objectives?; is advertising meant to influence the way children conceive adulthood? Likely, both processes occur simultaneously and interdependently: a certain demystification of the role and authority of the adult is an expression of sociocultural changes in intergenerational relations, which are picked up early by advertising, and, at the same time, children use their narratives to configure their discourse and relationship with the adult world. It is also interesting to compare the image that advertising discourse presents of a child capable of exerting social criticism and demands in the face of adulthood and its decisions, with the discourse of the children interviewed in the investigation. In the latter case, to give an example, children are very critical of the constant transgression of an «ethics of discourse» by adults (Habermas, 1989; 1991), since, according to their account, their arguments and reasons are not heard, they are not allowed to dissent, and the discursive acts of adults involving promises and commitments of some kind are often not respected further on.

Moreover, children appear to be developing new values due, in part, to the influence of media and cultural globalization phenomena, such as respect for nature, the rights of individuals and non-discrimination. In Chile, for example, the notion of children's rights is being incorporated into their language, becoming in some cases a tool for advocacy. An example of this is children who, alone or with the support of other adults, report their parents for physical abuse, or their schools for acts of discrimination. For Giberti (1997), who has analyzed similar situations in Argentina, these cases highlight existing fractures in an adult world that once seemed more compact, and is currently shown to children in all its ideological diversity, an issue the latter tend to perceive clearly. Authors like Garretón (2000) and Mayall (2002) have observed the emergence of an «intersubjective ethics» or «moral commitment», in which children emphasize the interpersonal well-being of children and adults over rigid principles. However, as mentioned above, advertising discourse seems to have an ambivalent relationship with this critical and demanding capacity in children, and does not grant them a role beyond the act of purchasing. A possible explanation for this is the importance of its commercial objective, which overtakes other considerations.

Finally, the role of the masculine gender in the advertising we have analyzed can be explained, in part, by the stereotypes held by those responsible for advertising campaigns developed for children's segments. It should also be noted that the discourse of the interviewed children is not necessarily innovative in terms of gender, as it responds to a traditional perspective, where the role of women is recognized through hidden, and in consequence, unseen strategies.

Notes

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[2] Snacks are generally associated with «junk food», and not part of the day's meals, but they are used to temporarily satisfy hunger at any time of day. Their nutritional value is low, containing excess additives, and do not usually contribute to health.

[3] According to market research firm ADIMARK (2004), the socioeconomic map of Santiago is structured as follows: upper strata (ABC1): 11.3%, middle strata (C2): 20.1% medium-low strata (C3): 25.6% lower strata (D): 34.5% and extreme poverty (E): 8.5%.

[4] The identification of advertising stereotypes, defined as categories, was conducted in an inductive manner; in other words, exploring the advertising text in order to identify the relevant aspects.

[5] The grid design for the analysis of the commercials considered six columns: Actants (people or animate and inanimate characters); Place; Audio; Actions, Identified Stereotypes and Grading of Importance.

[6] Andréu (2000: 25) notes that intentional sampling does not follow fixed rules, nor does it or specify in advance the number of units to select, on the grounds that it may be altered during the investigation, and with the aim of improving the quality and richness of the information. In addition, the selection of more units can be interrupted when it is understood that it has reached a saturation point by the amount of information collected.

[7] Exploratory study of children of middle socioeconomic status living in the city of Santiago, Chile, conducted between 2010 and 2011.

Support

References

ADIMARK (2004). *Mapa socioeconómico de Chile. Nivel socioeconómico de los hogares del país basado en datos del Censo*. Chile. (www.adimark.cl/estudios/2.act) (10-10-2011).

AMIGO, B. (2006). *Discursos sobre sexualidad en programas de alta audiencia en la televisión abierta*. Santiago de Chile: Ministerio de Educación.

ANDRÉU, J. (2000). *Las técnicas de análisis de contenido: Una revisión actualizada. Andalucía*. (http://public.centrodeestudiosandaluces.es/pdfs/S200103.pdf) (28-05-2011).

ASOCIACIÓN CHILENA DE AGENCIAS DE PUBLICIDAD (2010). *Inversión publicitaria en medios 2010*. Santiago de Chile: ACHAP (www.achap.cl).

BARDIN, L. (1986). *Análisis de contenido*. Madrid: Akal.

BELMONTE, J. & GUILLAMÓN, S. (2005). Televisión, educación, y construcción de identidad de los telespectadores. *Comunicar, 25*.

BRINGUÉ, X. (2001). Publicidad infantil y estrategia persuasiva: un análisis de contenido. *Zer, 10;* 107-129.

CAPDEVILA, A. & FERNÁNDEZ, J. (2006). Aplicación de un modelo retórico al análisis de la publicidad televisiva. *III Simposium de Profesores Universitarios de Creatividad Publicitaria*. Barcelona.

CATALÁN, C. (1982). *El mercado de las revistas de actualidad y la inversión publicitaria: el caso de Chile. Documento de Trabajo, ILET DEC/D/89*. México: ILET (Instituto Latinoamericano de Estudios Trasnacionales).

CHRISTENSEN, P. & JAMES, A. (Eds.) (2000). *Research with Children. Perspectives and Practices*. London: Falmer Press.

CONSEJO NACIONAL DE TELEVISIÓN (CNTV) (Ed.) (2003). *Informe 8/13. Los tweens chilenos. Santiago de Chile*. (www.cntv.cl).

CONSEJO NACIONAL DE TELEVISIÓN (CNTV) (Ed.) (2008). *Encuesta nacional de Televisión*. Santiago de Chile. (www.cntv.cl).

CONSEJO NACIONAL DE TELEVISIÓN (CNTV) (Ed.) (2010). *Publicidad en la programación infantil y adolescente*. Santiago de Chile. (www.cntv.cl).

FERNÁNDEZ, J. (2006). *La publicitat infantil a Televisió de Catalunya*. Barcelona: Consell de l'Audiovisual de Catalunya.

FERRER, M. (2007). Los anuncios de juguetes en la campaña de Navidad. *Comunicar, 29;* 135-142.

GARRETÓN, M.A. (2000). *La sociedad en que vivi(re)mos: introducción sociológica al cambio de siglo*. Santiago de Chile: Lom.

GILBERTI, E. (1997). *Las éticas y la adopción*. Buenos Aires: Sudamericana.

GREENE, S. & HILL, M. (2005). Researching children's experience: methods and methodological issues. In GREENE, S. & HOGAN, D. (Eds.). R*esearching Children's Experience: Approaches and Methods*. London: Sage; 1-21.

HABERMAS, J. (1989). *Teoría de la acción comunicativa: complementos y estudios previos*. Madrid: Cátedra.

HABERMAS, J. (1991). *Escritos sobre moralidad y eticidad*. Barcelona: Paidós.

KRIPPENDORFF, K. (1990). *Metodología de análisis de contenido. Teoría y práctica*. Barcelona: Paidós.

LOMAS, C. (2001). La estética de los objetos y la ética de los sujetos. COMUNICAR, 17; 31-40.

MAYALL, B. (2001). Understanding Childhoods: a London Study. In ALANEN, L. & MAYALL, B. (Eds.). *Conceptualising Childadult Relations*. London: Routledge Falmer; 114-128.

PERALES, A. & PÉREZ-CHICA, Á. (2008). Aprender la identidad: ¿qué menores ven los menores en TV? *Comunicar, 31*.

PROUT, A. (2001). «Preface». In HUTCHBY, I. & MORAN, J. (Eds.). *Children, Technology and Culture. The Impacts of Technologies in Children's Everyday Lives*. London: Routledge Falmer.

SÁNCHEZ, J.J.; GARCÍA, C.; GRAÑIDO, M. & BERGANZA, M. (2002). *El espejo mágico. La nueva imagen de la mujer en la publicidad actual*. Pamplona: Gobierno Navarro.

URIBE, R. (2005). Características de la publicidad infantil chilena en tiempos de mayor acceso a los medios y a los bienes de consumo. *Estudios de Administración, 12, 2*. Santiago de Chile.

VERGARA, A. & CHÁVEZ, P. (2010). *Televidencia y vida cotidiana de la infancia. Un estudio de casos con niños y niñas de Santiago*. Polis, 26.

VERGARA-DEL SOLAR, A. & VERGARA-LEYTON, E. (2008). La TV en la vida de la infancia: estudio de caso en Santiago de Chile. *Comunicar, 31;* 331-337.

VERGARA-LEYTON, E. & RODRÍGUEZ-SALINEROS, M. (2010). El impacto social y cultural de la publicidad entre los jóvenes chilenos. *Comunicar, 35;* 113-119.

YOUNG, B. (1990). *Television Advertising and Children*. Oxford: Oxford University Press.

WOODHEAD, M. & FAULKNER, D. (2000). Subjects, Objects or Participants? Dilemmas of Psychological Research with Children. In CHRISTENSEN, P. & JAMES, A. (Eds.). *Research with Children. Perspectives and Practices*. London: Falmer Press; 9-35.

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Music in Virtual Worlds. Study on the Representation Spaces

La música en los mundos inmersivos. Estudio sobre los espacios de representación

ABSTRACT

Sites for representing music have been classified by the equipollence between their expressive value and transmission value. In this dialectic game, the media have had a determining influence as an intervening space, from music imagined on the radio to its visual representation on a screen to today's multimodal display created through the integration of current existing media that expand music's potential both in terms of production and consumption. An interest in 'cross-media' is the basis for this research which focuses on its most integrated and interactive aspect: immersive worlds. The aim is to classify the environments of immersive worlds through analyzing those most used as spaces for musical representation. Documentary research techniques have been used in order to obtain: a census of current immersive musical environments, and a functional analysis of important cases. Through this analysis, various proposals are made for uses for immersive worlds, from both a technical perspective as well as from their potential as an interactive medium. In the conclusion, the possibilities for musical representation offered by these metaverses are assessed and possible future scenarios are discussed.

ABSTRACT (Spanish)

Los lugares de representación de la música han estado definidos por la equipolencia entre su valor expresivo y su valor de transmisión. En este juego dialéctico comunicativo, los medios de comunicación han jugado un peso determinante como espacios mediados: desde una ensoñación musical radiofónica a una visualización de la representación de la música en la pantalla hasta llegar a una exposición multimodal merced a la integración de los medios existentes en la actualidad en donde la música se ha visto amplificada tanto desde su actividad productiva como desde su consumo. Es precisamente en este «cruce de medios» donde surge el interés de esta investigación y, en concreto, en su extensión más integradora e interactiva: los mundos inmersivos. Como objetivo, se pretende realizar la caracterización de los entornos inmersivos musicales a partir del análisis de los más utilizados como espacio de representación. La técnica documental ha sido el método usado con el fin de obtener un registro censal de los espacios inmersivos musicales actuales y un análisis funcional de casos significativos. A partir de este análisis se exponen diversas posibilidades de aplicación de los entornos inmersivos tanto desde un punto de vista técnico como desde su capacidad como medio interactivo. Como conclusión, se lleva a cabo una evaluación acerca de la oportunidad que estos metaversos ofrecen a la representación musical en la que, en forma de discusión, se plantean nuevos escenarios futuros.

KEYWORDS

Metaverses, representation, musical, music, crossmedia, secondlife, virtual, Internet.
Metaversos, representatividad, musical, música, crossmedia, secondlife, virtual, Internet.

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1. Introduction

It is an axiom to state that music is communicative in nature. Throughout human history sound, as artistic performance, has been of great importance and exerted a vital influence on human beings as a communicative power, regardless of the age, culture or place where it was performed. The communicative value of music has benefited from the arrival of the mass media, particularly in terms of its representational potential. We have progressed from radio, as an imagined musical space, or TV and cinema as ideal locations for visualising musical representation, to the current third phase where this communicative potential has been expanded. The concept of cross-media has transformed and revolutionised all forms of audible representation, making a union between different approaches and the expressive possibilities of music feasible.

The street, the castle, the countryside, the palace, the theatre, café, temple, assembly hall… These are just some of the different places where music has been performed throughout history. Exceptional places for hosting a particular musical sound, a style, a genre, or an instrumental and/or vocal performance defined by the characteristics, fashions and taste of each age and/or people.

Before the arrival of the media, spaces dedicated to musical representation were necessarily places known by the listeners. Music, always performed live, began as a symbolic representation of different societies: a window through which it was possible to see a glimpse of a people's character.

These allegories spread with the arrival of radio, granting music the power of the media, a power which had been growing throughout the 20th and 21st centuries. Music from across the world, classical or modern, performed in familiar and new spaces were all heard from a single audible source: the radio receiver. At the dawn of radio broadcasting, music was transmitted from the traditional locations (theatres, assembly rooms, opera houses etc.). Over time, radio stations began to create new spaces with suitable acoustics which could accommodate different types of music groups. These new representational spaces helped create new types of music that were tailored to the radio stations' characteristics and to listeners' demands, cultivating principals of loyalty at the same time.

This led to the emergence of symphony orchestras specialising in specific genres or styles that were linked to certain radio stations and demonstrated the creativity of new composers of the time, as occurred in the majority of German radio orchestras that specialised in contemporary music (Stuttgart Radio Symphony Orchestra, 1945, Bavarian Radio Symphony Orchestra, 1949, Berlin Radio Symphony Orchestra, 1923, WDR Symphony Orchestra Cologne, 1947). Many of these orchestras, originally linked to private broadcasters, were absorbed by the state, as was the case with the French National Radiobroadcasting Orchestra, known as the French National Orchestra today.

At the same time as these orchestras performing 'highbrow' music were spreading and proliferating, radio broadcasting of folk and popular music also emerged with remarkable force. Popular music differed from folk as it was not linked to a nation or specific ethic background and was also distinguished by its short and simple compositions performed by musicians without formal studies who found their best allies for broadcasting their music in the mass media.

Musicians of all kinds can find a space of shared interests in radio that will give them the best coverage. The listener, in turn, participates by listening, but his/her perspective is still limited to fantasising about the audible story and imagining the represented place.

As Bertolt Brecht stated, before the arrival of the internet and more interactive media, radio should have two-way communication: «Radio has only one side where it should have two, it could be a true democratic medium where the listener not only listens but speaks; not to isolate him but to connect him» (Brecht, 1932-1981).

2. Background. The screen: an effective space for musical representation

Neither Constantin Perskyi, who coined the term «television» nor Paul Nipkow, inventor of the first ever television set, could have imagined the social impact it was going to have as a means of communication. For over 70 years, since the first television broadcasts made in England in 1936 and later at the New York Universal Exhibition of 1939, television broadcasting has acted as a catalyst for the thoughts, feelings and even likes and pleasures of a vast majority of people around the world.

Television became an extension of what was already occurring on the radio, and for the field of music it was the perfect broadcasting companion: a multi-environment stage capable of reaching millions of seats that could never fit in one theatre, cinema or stadium. Watching a performance of Richard Wagner's «The Ring of the Nibelung», going to a Beatles concert or seeing the gestures and movements of a belly-dancer are just a few examples of musical representation that can be enjoyed on television, a medium that rises up

like an international skyscraper housing different genres and musical styles alongside each other: modern groups and classical orchestras, the highbrow and the popular, Carnival and Lent.

Since then, television, in all its formats, variants and technological changes, has been an essential exponent of music in its various manifestations and representational forms (the Eurovision channel was created in 1953 using microwave transmission to exchange information and programming between European television stations. Satellite links arrived in 1960, leading to the creation of Mundovision. Teletext and stereo emerged in the 1980s and high definition was introduced at the beginning of the 1990s and is still being developed today, the age of digital television).

Despite this, television finds itself in the same situation as radio: its one-way nature means that real interaction is impossible. Negroponte stated that «we need to stop thinking about television as «television», its future is on the computer: […] Television will benefit most if it is considered in terms of bits… The television of the future will be the PC» (Negroponte, 1995: 67).

The term cross-media refers to the integrated nature of each and every type of media which, like an ecosystem, make the worldwide multimedia representation and broadcasting of music possible. Cross-media expands the potential of musical representation even further. Technological advances and developments have made this situation viable, whereby WebTV, SMS messages, mobile phones, the iPod, videogames or digital radio have become an intervening spider's web that connects and traps the user, regardless of the media being used.

This media convergence has not displaced any individual elements because media vary and audiences and social status changes; if a medium has functional expressiveness, makes a connection and creates practicable communication; it survives independently of the rest, as can be proved by the endurance of sound and voice recording (Piscatelli, 2004). In fact, completely the reverse is true; the convergence has strengthened the potential of each individual element, each of which has changed and adapted to the whole, creating a web of multimodal diversity, for example: pod-

casts, videos, twitsessions (which permit the user to attend concerts as a spectator in real time, directly interacting with the artists, requesting songs, sending greetings etc. (www.twitsessions.com)), web portals dedicated to re-broadcasting live concerts (e.g. Central Musical (www.centralmusical.com) where concerts are re-broadcast from various venues around Spain, el musikazuzenean (www.musikazuzenean.com), a website aimed at live music from the Basque Country or the Galician network of live music (www.clubtura.com), social networking sites that promote live

> Throughout human history sound, as artistic performance, has been of great importance and exerted a vital influence on human beings as a communicative power, regardless of the age, culture or place where it was performed. The communicative value of music has benefited from the arrival of the mass media, particularly in terms of its representational potential.

music such as NVIVO (www.nvivo.es) which has more than 280,000 concerts stored in its database covering styles as varied as rock, pop, hardcore, drum and bass, hip-hop, ska, heavy metal, techno, dub, flamenco etc. and is accessed by 250,000 registered users.

3. Study and analysis of musical representation in immersive worlds

In general, interactive media have different degrees of digital immersion. The experience is based on different strategies that combine transnational, symbolic and sensorial factors. Studies have shown that immersion in a digital environment improves learning in at least three ways: multiple perspectives, situational learning and transferral.

The user's experience in virtual immersive worlds is far better when they become actors performing on a stage. The imagination occupies the place of physical reality, demonstrating its use in the ways different immersive environments are accessed. They help «the relationship between the real and the imaginary by creating something new where problems can be sol-

ved; they work as a channelling element that develops the abilities to think and create that are so important for the acquisition of musical skills» (Gértrudix & Gértrudix, 2011: 51).

3.1. Characteristics and classification of immersive environments

As Manrique states, a virtual world is an environment simulated by a computer, inhabited by users represented by avatars. Avatars are considered to be the representation of the user on the computer, are generally three-dimensional and are used as an icon in any public internet space. They live in a real or fantasy world with existing or invented rules, some of which have their own economy (Manrique, 2009).

Virtual worlds were studied from Alan Klietz's Wizard, the first MUD, considered to be the first internet multiuser game, to the foundation of the first social network, known as 'TinyMUD', by Jim Apnes in 1989 (Bruckman, 1997), to the latest immersive environments established in the Second Life metaverse, using the following classifications a) the nature of access or ownership, with open or private code, or worlds that are designed in private environments but with free access (e.g. Second Life), b) the way the multimedia digital content unfolds, whether it uses web navigators or 3D animation motors, c) the capacity for interaction with other services such as social networks (Facebook, Twitter) or through another content management system (CMS, Moodle) and d) the environment's final design, from an 8-bit poetic narrative to the most sophisticated 3D design.

> Terrestrial digital media will tend towards absorption and/or disappearance in favour of dynamic internet communication that will be selected and analysed by the user. The arrival of devices that affect all of the senses (including touch and smell) will help the experience be even more inclusive. It will be possible to share memories, experiences and feelings with other avatars in virtual worlds.

3.2. Second Life and other metaverses

Experiencing music in immersive virtual worlds is on the increase. Second Life is a platform hosting multiple virtual worlds with a proliferation of environments (more than 3,500) in which the main content is music, particularly live concerts given by amateur and professional musicians who perform their songs from their own computer and even earn money for doing so (in August 2006 Suzanne Vega became the first artist to sing in a virtual concert). Financial transactions on Second Life in the first quarter of 2009 «reached over 120 million dollars, connection totalled 124 million hours and there was a peak attendance of 88,200 users» (Álvarez García, 2010: 320).

The following series of characteristics or identifying qualities are common to all virtual worlds: a) Shared space, b) Each participant has a user's graphic interface, c) A sense of immediacy as everything takes place in real time, d) The high level of interactivity that allows the user to continuously construct, regulate, recreate, change and inform personalised content, e) Persistency: the world continues even if you are not connected, and f) Socialization and community: interest-based communities organised around content and/or information.

One of the problems when trying to analyse this type of environment is the sheer number of classifications that have emerged since the birth of these worlds. Initials such as MOO (Object-orientated text-based virtual world that uses a chat application), MUD, TinyMUD, IRC (Internet Relay Chat), VR (Virtual Reality), VRML (Virtual Reality Modelling Language) all refer to the definition of their multiuser virtual environment characteristic.

From nightlife venues (bars and pubs) to locations themed around different musical styles and genres, to places dedicated to learning music, users of this metaverse can find a significant amount of options to enjoy a music-orientated experience.

Within Second Life, live performances are classified by the following seven categories: 1) spoken word (poetry, fiction or other reading), 2) live performance artists or musicians (singers/instrumental musicians with or without backing tracks, 3) theatrical representation (plays, dramatic productions), 4) dance, 4) DJ/Scratch, 6) Stand-up comedy, and 7) digital improvisation.

By examining the characteristics of each different environment it is possible to see a clear trend towards those musical genres related to popular music. This situation can also be seen in the Second Life directory where 144 music locations are distributed as follows: 25 live music, 9 cafés and cabarets, 6 folk music, 27 electronic and dance music, 5 hip-hop, R&B and reggae, 7 indie and alternative, 24 blues and jazz, 17 pop and 14 heavy metal. There is only one space dedicated to classical music: Music Island.

On top of this universe of events can be added live festivals with multimedia connections (e.g. Moebius Surfing Festival) or steamed performances by live groups as highly acclaimed as AC/DC, the Rolling Stones or Pink Floyd.

One problem with this type of music event lies in the limited number of participants, as attendance by over twenty spectators dramatically reduces output producing large audio and visual delays for viewers. An immersive musical space called «Reslive» was created in August 2010 which has partially solved this issue; it can support 150 avatars at the same time and, even with a system making copies of the virtual world, could have the capacity to host up to 5,000 attendees of the same show.

Besides these virtual worlds, a metaverse was created in September 2008 that tries to create mirror worlds that are exact copies of real cities. This immersive 3D medium has been named 'Twinity'.

To date, the cities that have been constructed are: Berlin (September 2008), Singapore (August 2009), London (December 2009), Miami (July 2010) and most recently New York, in October 2010. Among the many different events on offer are live performances by DJs that have been held every Tuesday since February 2010. Everything is run from inside Twinity, from the creation of an avatar to website promotion on Myspace or Metalabel.

Classical music has also been represented, to a lesser degree, by periodical events in immersive environments. There has been the odd isolated concert, as way of an experiment, such as that given by the Royal Liverpool Philharmonic Orchestra in a virtual replica of its concert hall where attendees could chat with the conductor in a virtual bar after the concert.

Mention must also be made of the Music Academy Inworld, a platform within Second Life. It is an interactive 3D environment that aims to generate interest in classical music on all levels, including music education, music appreciation and particularly the promotion of new music and new composers. The island has museums, interactive exhibitions, audio-visual classrooms, conference halls, projection rooms and an open space for concerts where a variety of activities take place such as concerts, recitals, conference and private classes. The space is located in the Second Life Utwig Sim and, since its creation in 2008, has run different events revolving around musical representation, including highlights such as: a Gustav Mahler festival, attended by 1,000 spectators, yearly Two Worlds festivals which last for nine days and focus on different themes related to virtual worlds and their potential for furthering knowledge about classical music or the introduction of a new artist, and collaborative projects with real concert halls to transmit live concerts etc.

4. Applications and musical uses of metaverses

This study has explained how wavelengths helped create an imaginary space of musical representation and how this proved to be a revolution in terms of communication and awareness of previously unknown sounds. Secondly, how television projected this imagination towards a visualization of the audible space and finally, how today cross-media is helping to make music broadcasting more dynamic with more opportunities thanks to the extensive availability of connected media.

Immersive worlds have become a unique platform of opportunities for musical representation; one more step in the «panoply of media that shape the contemporary spectrum of social communication, this never-ending flow of media-based texts that flood our reality» (Gértrudix & Gértrudix, 2010: 102). These are invented worlds, semi-impossible places to perform music, such as under the sea in the submerged world of Oceanus, in the sky (Skytage) on top of a mountain, or in worlds that mirror real places (cities, theatres, stadiums, concert halls etc.).

The musical experience is a constant feature of immersive environments and Second Life, with more than 10 million inhabitants, has become the most popular metaverse in recent years and continues to grow. In contrast with other metaverses, it is entirely at users' disposal and it is they who create and own all of the content.

There are other coexisting virtual worlds which also have musical representation as one of their underlying principals, including Worlds.com, There.com (similar to Second Life but aimed at adolescents), Multiverse, Virtual Vancouver, Entropia Universe, Active Words, the Metaverse free code platform. In Worlds.com, acclaimed artists such as David Bowie and Aerosmith have developed interactive, immersive environments specifically for their fans. Aerosmith, for

example, have built a futuristic city, an exotic temple, a roadside restaurant and a stage for their concerts.

It is also important to understand exactly who the target users are who live and cohabit in these immersive environments. According to Alfonse González, in demographic terms, 26% of Second Life inhabitants are young people between 18-24 years of age, 38% are between 25-34, 22% are between 35-44 and the remaining 12% are over 45. Approximately 25% of Second Life gamers are women. The 'typical' Second Life gamer spends between 20 and 40 hours a week on the game. It certainly seems that it is the first successful example of what futurists have called 'metaverses', or «virtual worlds inhabited by real people» (González Herrero, 2010: 122).

5. Conclusions. Speculating on a possible future

«The Internet is constructing the world, not only by being mimetic in nature, but through the possibilities of fictionalising life itself. […] In the metaphor of virtual worlds […], the Internet is not a second life, it is a fiction of life, but not even this lessens the implications of its irremediable connection with reality» (García-García & Gértrudix, 2009). We agree with these authors on the postulated metaphor existing in immersive worlds. This condition is increasingly emphasised due to ever more perfect technology and advances to the immersive element which permits the user to interact with the machine without the need for physical contact through a keyboard, mouse or traditional videogame controls. The body's own movements, the use of voice to send messages and even eye movements are the best (natural) extensions when interacting with a virtual world: body movements and/or voice instructions that translate into actions and movements in the avatar within the metaverse. The user's experience becomes far more seductive and accessibility greater due to this inclusive interaction.

A good example is Nintendo who introduced the Wii into the market, although a set is still required in order to interact. Microsoft have followed their lead with Kinect, a free game and entertainment device that recognises gestures, voice commands, objects and images through a natural user interface. Tests using Kinect within Second Life have already been run. The University of South California Institute for Creative Technologies has made it functional within the metaverse and currently any user that has a Microsoft set can use it within Second Life's virtual worlds, thanks to the advantages of OpenNI technology.

This is a key technological advance for musicians. That the hand and finger movements of a violinist, or a pianist, or the movements of an orchestra conductor could be made real in time and appearance has positive repercussions not only for the specific needs of musical representation but also heralds positive effects on the teaching-learning process, on creation or on music consumption, all thanks to this optimum immersion level. Immersion is both visual and aural, in 3D and surround sound, achieving a completely personalised audible experience.

Immersive media are the ultimate showcase for musical representation. However, this is merely the beginning; in the future present the search for solutions has not finished. Technological advances will help develop new but ever-changing strategies.

Terrestrial digital media will tend towards absorption and/or disappearance in favour of dynamic internet communication that will be selected and analysed by the user. The arrival of devices that affect all of the senses (including touch and smell) will help the experience be even more inclusive. It will be possible to share memories, experiences and feelings with other avatars in virtual worlds.

Predictions for immersive virtual worlds suggest dramatic, exponential growth. The number of users in 2013 has been predicted to reach 1,900 million (33% of the world population), meaning that one in three people will have a virtual world avatar. This figure almost exactly matches predictions made by consultancy IDATE that the internet mobile phone penetration rate will be 37% of the world population.

Proportionally, this suggests that the number of immersive worlds dedicated to music will grow and therefore the possibilities for its representation will grow too. Furthermore, today it is a fact that any user is a potential 'prosumer' and actual consumer, so in the sphere of music he/she becomes a performer (whether by dancing, singing or playing) and spectator at the same time.

In this positive future there is no space for creative individuals but, given that all music «is immediately accessible, what is new in the behaviour of its consumers is, among other things, how they use it for identity itself, although not in an individual, exclusive way, but one negotiated with the rest of the virtual community through social networking (Aguilera, Adell & Borges, 2010: 43). As many voices predict, the experience will be the new reality. Then we will venture to dream.

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References

AGUILERA, M.D; ADELL, J.E. & BORGES, E. (2010). Apropiaciones imaginativas de la música en los nuevos escenarios comunicativos. *Comunicar, 34, XVII*; 35-44.

ÁLVAREZ GARCÍA, S. (2010). En busca del «Auleph». Aproximación a los entornos digitales de gestión del aprendizaje. *Icono, 14, A8*; 303-327. (12-05-2011).

BRECHT, B. (1932-1981). Teoría de la radio (1927-1932). In BASSETS, L. (Ed.). *De las ondas rojas a las radios libres. Textos para la historia de la radio*. Barcelona: Gustavo Gili.

BRUCKMAN, A. (1997). *MOOSE Crossing: Construction, Community, and Learning in a Networked Virtual Wold for Kids*. Massachusetts: Doctoral dissetation, MIT.

GARCÍA GARCÍA, F. & GÉRTRUDIX, M. (2009). El Mare Nostrum Digital: mito, ideología y realidad de un imaginario sociotécnico. *Icono 14, 12*; 7-30 (08-06-2011).

GÉRTRUDIX, F. & GÉRTRUDIX, M. (2011). La educación musical en entornos inmersivos. *Eufonía, 51*; 44-52.

GÉRTRUDIX, M. & GÉRTRUDIX, F. (2010). La utilidad de los formatos de interacción músico-visual en la enseñanza. *Comunicar, 34, XVII*; 99-107.

GONZÁLEZ HERRERO, A. (2010). La convergencia de los videojuegos online y los mundos virtuales: situación actual y efectos sobre los usuarios. *Zer, 15, 28*; 117-132.

MANRIQUE, M.J. (2009). *Introducción a los mundos virtuales 2009*. (www.slideshare.net/marlonj/introduccion-a-los-mundos-virtuales-2009) (12-05-2011).

NEGROPONTE, N. (1995). *El mundo digital*. Barcelona: BSA.

PISCITELLI, A. (2004). La web como sistema virtuoso/vicioso. *II Congreso On-line del Observatorio para la Sociedad*. (www.ciber-sociedad.net/congres2004/grups/fitxacom_publica2.php?grup=99 &id=676&idioma=es) (07-07-2011).

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Media Literacy and Consumption of Media and Advertising in University Students of Pedagogy in Chile

Alfabetización audiovisual y consumo de medios y publicidad en universitarios de Pedagogía en Chile

ABSTRACT

The main aim of this work, based on the results of studies on the mediating role of the media, particularly television, and advertising in different age groups, together with the need to discuss the processes of audiovisual or media literacy, was to analyse the patterns of media consumption among students of Pedagogy in Language and Communication, Mathematics, and History and Geography at Chilean universities. The objective was also to determine whether there are differential profiles in the use and consumption of media related to the future role of these profiles in the audiovisual literacy of the students. To do this, a non-random sample was used comprising 881 Pedagogy students of both genders studying at seven universities in southern and central Chile. The «media consumption questionnaire» was used for data collection. In general, the distribution of preferences by gender and degree course falls short of representing idiosyncrasy in terms of the media, and reflects outside realities that do not permit participation in citizenry processes to be strengthened in media consumers. In short, the biggest problem is that future teachers do not seem to have the tools that allow them to manage the work of audiovisual literacy since they themselves have difficulties in differentiating between information and persuasion in advertising messages.

ABSTRACT (Spanish)

Considerando los resultados de estudios sobre el rol mediador de los medios, especialmente la televisión y la publicidad en distintos grupos etarios, sumados a la necesidad de discutir los procesos de alfabetización audiovisual o alfabetización mediática; el principal objetivo de este trabajo fue analizar los patrones de consumo de medios en estudiantes de universidades chilenas y determinar si existen perfiles diferenciales en el uso y consumo de medios que se relacionen con su futuro rol en la alfabetización audiovisual de sus estudiantes. Para ello, se consideró una muestra de tipo intencionado que quedó constituida por 881 estudiantes de pedagogía de ambos sexos que cursaban estudios en siete universidades chilenas de la zona sur y central de Chile. Para la recolección de datos se utilizó el «cuestionario de hábitos de consumo de medios». En general, la distribución de las preferencias, tanto a nivel de género como por carrera, no logra representar mediáticamente la idiosincrasia y refleja realidades ajenas que no permiten fortalecer procesos ciudadanos en los consumidores de los medios. En síntesis, la problemática mayor es que los futuros docentes no parecen contar con herramientas que les permitan enfrentar la labor de alfabetización audiovisual, dado que ellos mismos presentan dificultades para diferenciar entre la información y la persuasión en los mensajes publicitarios.

KEYWORDS

Pattern, audio-visual literacy, consumption of media, advertising, students, university, pedagogy, critique.
Patrones, alfabetización audiovisual, consumo de medios, publicidad, estudiantes, universidad, pedagogía, crítica.

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1. Introduction

Several authors agree that globalisation exerts considerable influence on people's daily lives, both in terms of values and cultural expression (Girardi, 1997; González & Muñoz, 2002). One of the main vehicles for exerting this influence is the mass communication media, including advertising, when these media act as homogenisers of interests, behaviours and attitudes (Cid & E. Nogueiras, 2005). Such is the impact that the media has had that there is an assertion that the rationality of social relations today is based on the fight to dominate the symbolic media, and in particular the media of material production (García-Canclini, 1995).

Television in Chile has a penetration rate approaching 99% of the population (AIM, 2008), which is why it is obvious that despite the dramatic emergence of the Internet and in particular the impact of social networks, a large part of the population still consumes television on a massive scale; and in many cases a parallel consumption of both occurs. It is clear that a mass communication medium popular for so many years will have a substantial impact on the social and cultural plane and on the socialisation processes of younger generations, where it is even beginning to compete with the traditional authorities represented by the family and school.

We have only to consider the time spent by children in front of the television and the impact that this has had on the shaping of their forms of communication. Thus, we now have generations of children who repeat expressions from television series or who express their consumption demands in terms of the brands that are prevalent in the television advertising of the moment (Del Valle, Vásquez, Denegri & Sepúlveda, 2010).

In fact, several studies in recent years have demonstrated that children and adolescent audiences continue to prefer television to any other mass communication medium, spending several hours a day watching it (Livingstone, 2008; Marta & Gabelas, 2008; Medrano, Palacios & Aierbe, 2007; 2010). For McLuhan (1996), television has had a direct impact on the conceptual organisation of the world: the mosaic structure of television has supplanted the linear structure of the press, modifying the causal way people think in the West. This author also stated that the messages of the media are changes of scale, rhythm or patterns (McLuhan, 1996: 30), i.e., each medium contributes substantial modifications to the cultural and cognitive organisation of human beings. For Baudrillard (1974; 1978; 1994; 2002), television participates in the post-modern increase in «sign values», or symbolic values, replacing the satisfaction of needs with the need for differentiation, thereby subjectivising the reality of the objects consumed.

Martín-Barbero (1987; 1996; 1999) indicates that in Latin America the media have allowed a «loss of centre» to occur, in which there is no longer a central culture, but rather an assortment of de-centred cultures, where democracy itself is constructed on the basis of the media's communication games, in the «nexus of questions and discourses» that turn us into political subjects. Therefore, the media co-construct reality together with the users, breaking the rigid traditional schemes that delimited «real» and «fictitious» through the existence of a mosaic of knowledge and thought, of territories and limits, of «intertextualities», which must be structured to the extent to which we interact with this mosaic via the new technologies, as well as via the new imaginations of our culture.

In this context, the family plays a fundamental role in introducing mass media consumption habits to children, particularly in the first stages of infant socialisation (Martinez & Peralta, 1998; Berenguer, Mollá, Pérez & Canovas, 2001, Denegri, Gempp, Del Valle, Etchebarne & González, 2006). However, school, and especially educators, play a central role in educating adolescents to think critically about the mass media (Berenguer & al., 2001; González & Muñoz, 2002), which enables them to order the «mosaic» of information available on television.

In Chile, exposure levels to children's advertising in the related segments are similar to those in the United States (around 10% at weekends, and 14% on theme channels). The most advertised products are food and toys, at 39.5% and 35.1% respectively (Uribe, Hidalgo, Martínez & Muñoz, 2006). This is not an insignificant topic, considering that children's advertising has been linked to poor nutritional habits in children (Halford, Gillespie, Brown, Pontin & Dovey, 2004; Lobstein & Dibb, 2005), and in Chile the empirical evidence points to a similar situation (Olivares, Yáñez & Díaz, 2003).

It has also been proven that exposure to alcohol advertising has negative effects on adolescent conduct (Anderson, de Brujin, Angus, Gordon & Hastings, 2009; Villani, 2001), which is not surprising considering that the mass media are intimately linked to spheres of peer influence, being one of the favourite subjects of young people (Gilles, 2003).

Furthermore, the media are so-called socialising agents of reference (in contrast to the socialising agents of belonging, like the family). These agents have an enormous influence on the construction of the adoles-

cent's identity and reality: a huge amount of information, values, habits, myths, beliefs and models and idols that can be drawn from the media can support the transition from childhood to adulthood (Gilles, 2003; Vera Vila, 2005). Additionally, there is evidence to suggest that the age of maximum impact and influence of advertising is 12 (Te'eni-Harari, Lehman-Wilzig & Lampert, 2009).

In light of these results, the concept of «audiovisual literacy or «media literacy» is crucial, as several authors have suggested (Buckingham, 2005; Kellner & Share, 2007; Livingstone, 1999; 2004; 2007; Zarandona, Basterretxea, Idoyaga & Ramírez, 2008). In other words, individuals must be equipped through a formal educational system with the «knowledge, abilities and competencies that are required to use and interpret the media» (Buckingham, 2005: 71); but to do this, contextualised incorporation is required (Del Valle, 2005).

However, the raw material necessary to obtain changes of this type are teachers trained in the critical analysis of the media. This type of education is not currently part of the curricula in pedagogy degree courses in Chile. Therefore, the aim of this work was to analyse the patterns of media use among students of Pedagogy in Language and Communication, Mathematics, and History and Geography at Chilean universities, and to determine whether there are differential profiles in the use and consumption of media related to their future role in the audiovisual literacy of their students.

2. Materials and Methods
2.1. Participants
The non-random sample comprised 881 pedagogy students of both genders enrolled in seven universities in the southern and central areas of Chile, corresponding to 21.7% of students of Pedagogy in Language, 39% of students of Pedagogy in Mathematics, and 39.3% of students of Pedagogy in History.

2.2. Instruments
For data collection, the «media consumption questionnaire» was used (Denegri & al., 2008a), which included 18 questions, of which 12 were multiple choice and 6 were open response. In addition to demographic data, this questionnaire also collected information about frequency and type of television and Internet use, including advertising recall and favourite programming.

> Without media-literate teachers with the reflective and pedagogical capacities to address education within the framework of a critical reading of the media, children will grow up at an enormous disadvantage, unable to develop adequately in a competitive world highly mediated by consumption as the backbone of identity construction processes. One might therefore wonder about the impact that this lack of a critical view of the media in the basic training of our future teachers will have on learners, and how it will influence the processes of building citizenship in future generations, where the equation between citizen and consumer seems to be increasingly tending towards only being consumers

2.3. Procedures
A letter was sent to the Faculty Deans and Course Directors of all the Chilean universities associated with the Public Universities Council that offered the degree courses of Pedagogy in Language and Communication, Pedagogy in History, Geography and Civic Education and Pedagogy in Mathematics, in which the aim of the study was explained and consent was sought.

Once the study was approved, a database was requested in predefined format to prepare the final composition of the sample, considering the necessary replacements in the event of non-participation. Once the sample had been selected, the students were contacted personally, explaining the purpose of the study

and asking them to sign an informed consent, which authorised their being considered part of the study.

All the questionnaires were applied by trained interviewers and downloaded into a database for analysis.

3. Results

Two stages of analysis were performed in order to create a media use profile. First, the favourite programmes of pedagogy students were categorised according to the OBITEL classification in Chile, slightly modified, as will be seen in the following. Second, the students' attitudes and recalls in relation to televised advertising spots were reviewed. The results of this study revealed some very interesting data.

With respect to the programmes, the categories used were those indicated by the information from OBITEL (Fuenzalida & Julio, 2010), with slight modifications. For example, the subcategory of «star» was omitted as it is a commercial category that does not refer to the type of programme but to a preferential schedule, the commercial value of which is higher, and as such this would hide the real data. Likewise, the subcategory «entertainment» was re-named «edu-entertainment» to focus more on those programmes that provide educational content in an entertainment format, generally suitable for all ages, and that seek to grab the audience's attention through a light and funny presentation, rather than by its specific content. The following table summarises the categories and subcategories used.

The data analysis reveals results consistent with other studies. For example, it highlights that the favourite categories are fiction (44%), information (30%), and live shows (17%). The OBITEL national analysis (Fuenzalida & Julio, 2009) exposed the same preferences, with slightly different percentages for 2008 (37%, 25%, 21%, respectively); however, in 2009 there was a dramatic increase in the audience for informational programmes, surpassing fiction programmes with a total of 36.7% compared to 34.9% of the fictional programme audience (Fuenzalida & Julio, 2010). However,

these studies did not release any data by age group. Other international studies seem to show that while adults prefer to watch informational programmes, adolescents and young people prefer fictional programmes (Medrano, et al., 2010).

The differences by gender also seem consistent with the international evidence. Therefore, while the women showed a high preference for fictional programmes (48.7%) and almost zero preference for sport programmes (0.2%), the men were less emphatic in their first preference, with a relatively high prevalence of preference for sport programmes (36.1% and 12.3%, respectively). This is consistent with international findings, which show that, as they advance in age, women usually prefer soap operas or series types of programmes, whereas the men show more heterogeneous tastes, but with noticeable preferences for sports and series (Gilles, 2003; Livingstone, 1999).

It should be noted that although sport only represents the fourth preference for the men, as can be seen in table 2, this is a much less complex category than the others, which is why such a high number is significant.

Nevertheless, the most interesting differences are observed when comparing the results by degree course. Although the preferences follow the same order already established, there are some extremely striking findings. These findings, summarised in Figure 1, are related particularly to the high preferences for informational programmes by Pedagogy in History (40.3%), compared with Language (26.9%) and Mathematics (28.2%). In addition, Pedagogy in History is the course that watches live shows the least (11%, compared to 24.4% of Language and 16% of Mathematics). These findings can be shown on a graph in some emblematic subcategories: while Pedagogy in History shows a low preference for reality shows (0.7%), Pedagogy in Language reaches 5.8% in this subcategory. At the

Fiction	Film	Live shows	Game show
	Fiction TV		Edu-Entertainment
	Animated Series		Artistic Event
	Teletheatre		Show business
Information	Documentary/News Report		Humour
	Docu-Reality		Other type of live show
	Interview/Debate		Reality Show
	Informational Event		Talk Show
	News		Variety show
	Other	Sports	Sporting Event
Service	Instructional		Sport Programme
	Morning Show	Other	Infomercial
	Mediation		Video Clip
	Religious		Others

Table 1. Categories and subcategories of programmes.

	MEN	WOMEN
Fiction	36.1%	48.7%
Information	34.7%	31.1%
Live show	15.2%	16.1%
Service	1.4%	2.9%
Sport	12.3%	0.2%
Others	0.3%	1.0%

Table 2. Differences by gender in the favourite categories.

other extreme, while 23% of the students of Pedagogy in History indicate a news programme as their favourite program, only 14.1% of the students of Pedagogy in Language list this type of programme as their favourite. Mathematics usually falls somewhere in between (4.5% in the case of reality shows, and 18.6% in the case of news programmes). It should be pointed out that the subcategories preferred by the students are those of fiction TV (soap operas and series), news, animation and documentary/news reports. This last category merits separate mention since, due to its particularly scientific-humanist nature, the Pedagogy in Mathematics course is the one that reports the least preference for it (5.8%, compared to 10.3% of Language, and 12.3% of History).

The provenance of the programmes preferred by the students was also analysed, particularly in relation to the subcategories of fiction and documentary/news report, as these were two of the favourite subcategories, whereas of the other two, one (animation) is exceedingly international, while the other (news) brings together mainly national productions. The results indicate that, of all the programmes mentioned in the fiction subcategory, 39.6% were national productions, while 60.4% were international productions. In the case of documentary/news reports, a similar proportion is observed, with a 34.3% preference for programmes produced nationally, compared to a 65.7% preference for international programmes. This is consistent with the increase in the diffusion of cable TV in Chile, which for 2008 exceeded 43% penetration in Chilean homes. For that same year, 46.1% of the population were satisfied with free-to-air television, compared with 69.2% that were satisfied with cable television (CNTV, 2008). And several studies have indicated that the national soap operas,

which were supposed to be the greatest national strength in the fiction category, have been losing audiences rapidly in recent years (CNTV, 2008; Fuenzalida & Julio, 2010). All this seems to have a strong impact on the results presented, and indicates a strong dissatisfaction with national programming, replaced by the increasingly accessible cable television. This is particularly interesting, given that, as has been indicated by various experts (Livingstone, 2008), this type of media distribution does not really represent the idiosyncrasy of a country, and reflects external realities that do not enable participation in citizenry processes to be strengthened in media consumers.

In the case of television advertising, the analysis procedure consisted in calculating the frequency of the responses so as to then categorise them with the aim of identifying the types of products and services recalled. The next step was the perception analysis that the aforementioned sample had about advertising, indicating the function that this fulfils in promoting a product. The students were asked about the aim of advertising in promoting a product, through four response options that took into account the following functions: advertising as a source of objective information about a product; advertising as a tool that orients consumers' selection when choosing a certain service or product; advertising as a tool that compels consumers to choose certain product; and advertising as a medium with no visible use.

The information collected in both procedures was compared based on the gender and degree course of the sample. Around twenty categories were obtained that group all the commercials recalled by the students. These categories comprise, for example: «Banks», «Transport», «Television programmes», «Gas», «Sport clothes», «Telephone services», among others. In the comparison by gender, the women reported recalling
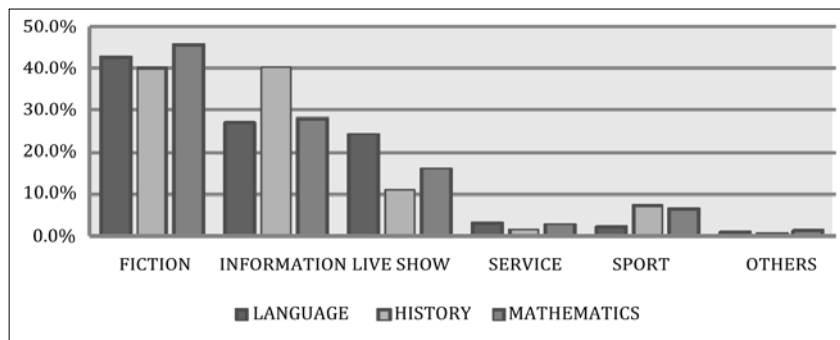

Figure 1. Differences by degree course in the favourite categories.

advertising about products in the categories «Non-alcoholic drinks» (soft drinks, juice, tea, coffee, mineral water, etc.) and «Personal hygiene» (soap, shampoo, deodorant, etc.) to a greater extent than the men. The men showed better recall of commercials about «Alcoholic drinks» (beers, wines, liquors, etc.), «Foods» (ready-made meals, vegetables, pastas, chocolates, etc.) and «Banks» (banking services such as consumer loans, as well as banking organisations). In the category «Stores» (department stores) and «Drugs» (analgesics, antibiotics, etc.), no differences were observed between the two groups.

In the comparison by degree course, the non-alcoholic drinks were recalled more by the students of Pedagogy in Language (33%), with similar frequencies being observed in Pedagogy in History and Mathematics (24%). The products in the category «Foods» were recalled most frequently by the students of Pedagogy in History (16.1%), followed by Pedagogy in Mathematics (11%), and finally those of Pedagogy in Language (8.5%). The commercials about the non-alcoholic drinks were recalled more by the students of Pedagogy in Mathematics (15.8%), whereas similar frequencies were observed between Pedagogy in History and Language (12%). Finally, advertising for telephone and Internet services was recalled most by

gests that advertising is an objective source of information was in second place ahead of the orientation function, and the students of Pedagogy in Mathematics were more inclined towards this option. These results are particularly troublesome, as will be discussed in the conclusions.

It is interesting to note that the most recalled advertisements were those whose contents were oriented to peripheral elements of the message – such as jingles, names, colours, animals, personalities – rather than the more direct elements, i.e., more direct information about the product or service. However, in many cases, these peripheral elements were associated erroneously to similar brands. This unexpected finding seems to demonstrate that national advertising is failing in one of its main targets, which is to persuade and cultivate loyalty in the young audience.

4. Discussion

In general terms, we can say that «schools have maintained a polarised position regarding their particular interests, letting the media in but without listening to them, analysing them or stripping the semiotic and communicative gearbox found inside» (González & Muñoz, 2002: 209), so that we can educate those most subjected to their influence to use them to their benefit. Some authors go further, declaring it «highly irresponsible» (Kellner & Share, 2007: 4) to ignore these forms of socialisation and informal education in the formal education curriculum (Zarandona, Basterretxea, Idoyaga & Ramírez, 2008).

The results obtained in the present study seem to confirm these assertions in addition to
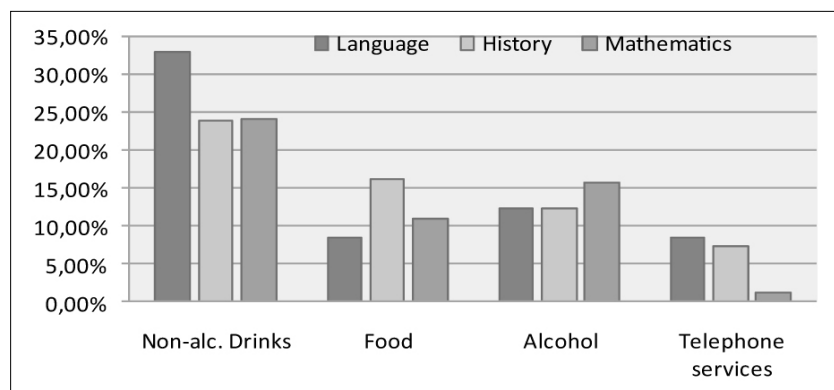

Figure 2. Type of advertising recalled by degree course.

students of Pedagogy in Language (8.5%), then by students of Pedagogy in History (7.4%), and lastly by students of Pedagogy in Mathematics (1.4%). These results are illustrated in figure 2.

When analysing the responses obtained about the function of advertising according to the pedagogy students, advertising was perceived as seeking to persuade or compel the consumers into choosing a certain product. The students of Pedagogy in History, followed by those of Language, were those that tended more towards this alternative. The alternative that sug-

indicating a profile differentiated by degree course. Indeed, it can be inferred that the students of Pedagogy in History appear to be the consumers most critical of the media, making ample use of the informational opportunities from both television and the Internet. It is both noteworthy and troublesome that the Pedagogy in Language course, which by definition is the one principally responsible for educating young people about the media, appears to be poorly prepared and with little critical consciousness for including and then mediating children's learning about the real
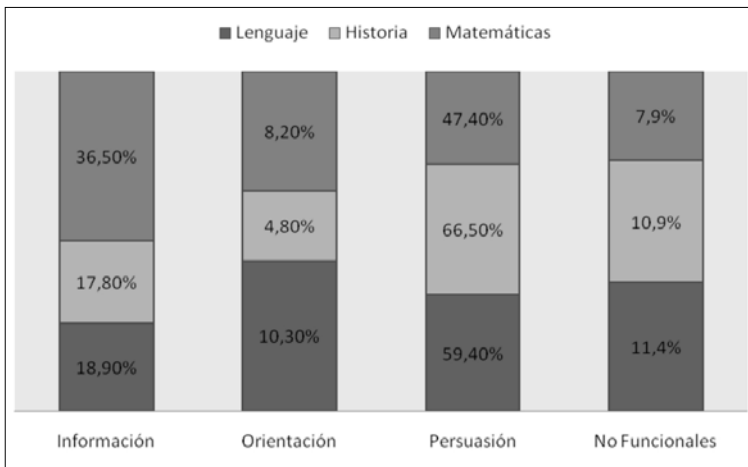
Figure 3. Function of advertising, by degree course.

function of television – which is currently the «basic» mass media. One finding that confirms this concern is tied to their low use of the Internet to inquire about topical subjects compared with the Pedagogy in History course.

In terms of understanding television advertising, an alarming phenomenon is noted: a far from negligible proportion of pedagogy students considered that the main aim of advertising is to provide information about available products. Although most considered advertising a tool of persuasion, the fact that the second largest group of students in the sample thought advertising was a means of contributing objective information about the products it promotes is an important indicator that reveals a distortion in the actual level of understanding of the true content and the manner in which advertising delivers this content, where it is clear that its main function is to persuade and deliver the content in a way that effectively impacts consumers. In fact, many pedagogy students –particularly in Mathematics– reach a level of analysis which, according to international studies, should be overcome as of eight years of age (Calvert, 2008; Pecora & al., 2007).

In this same regard, it is remarkable that the most recalled advertisements were those whose contents were oriented to peripheral elements of the message – such as jingles, names, colours, animals, personalities– rather than the more direct information about the product or service, and these were even wrongly associated with similar brands. This finding would seem to reaffirm the conclusion of an extremely passive and uncritical position about the advertising message, which makes one more susceptible to influence via the less reflective routes of information processing. Although we raised it previously, this could show a

weakness in the formulation of the messages in national advertising. It also sheds light on the nature of information processing by young consumers and is an issue that other investigations will need to explore further.

Nevertheless, there is common ground. In all the degree courses, a very similar scenario of preferences was formed. However, the Chilean television programme offering appears to have little relevance to these preferences, with media needs having been supplanted by international channels, which appears consistent with various national reports.

In this globalised world, it is fundamental that teachers contribute to children's ability to sort through the information mosaic provided by the mass communication media, to view it critically. It seems basic that they be at least able to function with reasonable ease when watching television.

Also, teaching about advertising is relevant to students' education as informed and not passive consumers, since it allows them to confront the negative effects that this produces on people and society. According to Araque (2009), five effects of commercial advertising can be clearly identified: 1) It tends to reproduce the roles traditionally associated with responsibilities differentiated between men and women, which does not respond to the present needs of gender equality; 2) Advertising used to promote toys in particular resorts to measures that disguise the reality of products, which is known as misleading advertising; 3) The idea is given that problems are solved through the acquisition and use of a certain product; 4) It homogenises the population of many countries in their behaviours and interests so that they consume similar products; 5) Commercial advertising, in order to increase impact and effectiveness, uses sex and the body as a lure through attractive male and female models, provoking in other people dissatisfaction with their own body.

On this basis, students must be educated to be able to interpret critically and actively the sources of information and particularly the persuasive messages that come from advertising. However, as we have seen in this study, future teachers do not seem to have the tools to manage the work of audiovisual literacy, since they themselves have difficulties in differentiating

between information and persuasion in advertising messages.

From the results obtained, the evidence suggests that Chilean teachers are not receiving the basic training necessary to fulfil the role of mediators in the construction of a critical view of the media in the classroom, but instead they conceive it as a mere work tool, without understanding its function as a socialising and educational agent (Camps, 2009).

Without media-literate teachers with the reflective and pedagogical capacities to address education with∫in the framework of a critical reading of the media, children will grow up at an enormous disadvantage, unable to develop adequately in a competitive world highly mediated by consumption as the backbone of identity construction processes. One might therefore wonder about the impact that this lack of a critical view of the media in the basic training of our future teachers will have on learners, and how it will influence the processes of building citizenship in future generations, where the equation between citizen and consumer seems to be increasingly tending towards only being consumers (Denegri & Martínez, 2004).

Support

References

AIM (2008). *Grupos socioeconómicos*. Santiago de Chile: Asociación Chilena de Empresas de Investigación de Mercado.

ANDERSON, P.; DE BRUJIN, A.; ANGUS, K.; GORDON, R. & HASTINGS, G. (2009). Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies. *Alcohol & Alcohlism, 44 (3);* 229-243.

ARAQUE, N. (2009). Los medios de comunicación desde su vertiente didáctica, dentro de la universidad. *Revista de Ciencias Sociales, 3;* 1-21.

BAUDRILLARD, J. (1974). *La société de consommation: ses mythes, ses structures.* Paris: Gallimard.

BAUDRILLARD, J. (1978). *A la sombra de las mayorías silenciosas.* Barcelona: Kairós.

BAUDRILLARD, J. (1994). *Simulacra and Simulation.* Ann Arbor: University of Michigan Press.

BAUDRILLARD, J. (2002). *Crítica de la economía política del signo.* México: Siglo XXI.

BERENGUER, G.; MOLLÁ, A.; PÉREZ, P. & CANOVAS, P. (2001). Los adolescentes como consumidores: la familia como agente de socialización. *Estudios sobre Consumo, 58;* 35-46.

BRIGGS, A. & BURKE, P. (2002). *De Guntenberg a Internet. Una historia social de los medios de comunicación.* Madrid: Santillana.

BUCKINGHAM, D. (2005). *Educación en medios. Alfabetización, aprendizaje y cultura contemporánea.* Barcelona: Paidós.

CALVERT, S. (2008). Children as Consumers: Advertising and Marketing. *Future of Children, 18 (1);* 205-234.

CAMPS, V. (2009). La educación en medios, más allá de la escuela. *Educar, 32;* 139-145.

CID, M.C. & NOGUEIRAS, E. (2005). El análisis de la publicidad en la formación del profesorado. In MEMBIELA, P. & PADILLA, Y. (Eds.). *Retos y perspectivas de la enseñanza de las ciencias desde el enfoque ciencia/tecnología/sociedad en los inicios del siglo XXI.* Vigo: Educación Editora.

CNTV. (2008). *6ª encuesta nacional de televisión.* Santiago: Consejo Nacional de Televisión - Adimark.

DEL VALLE, C. (2005). Pedagogía de la comunicación. Los medios en las escuelas. *Chasqui, 89;* 32-39.

DEL VALLE, C.; VÁSQUEZ, L.; DENEGRI, M. & SEPÚLVEDA, J. (2010). Concepciones de tweens chilenos con respecto a la publicidad emitida por Televisión. *Signo y Pensamiento, 57 (2);* 418-429.

DENEGRI, M.; GEMPP, R.; DEL VALLE, C.; ETCHEBARNE, S. & GONZÁLEZ, Y. (2006). El aporte de la psicología educacional a las propuestas de educación económica: Los temas claves. *Revista de Psicología, 15 (2);* 77-94.

DENEGRI, M. & MARTÍNEZ, G. (2004). ¿Ciudadanos o consumidores? Aportes constructivistas a la educación para el consumo. *Paideia, 37;* 101-116.

DENEGRI, M. & AL. (2008a). *Yo y la economía: diseño, aplicación y evaluación de impacto de un programa de educación económica en escolares de 6º de Básico de Temuco.* Santiago de Chile: Proyecto Fondecyt (Fondo Nacional de Desarrollo Científico y Tecnológico).

FUENZALIDA, V. & JULIO, P. (2009). *3º Informe OBITEL - Chile.* Santiago: OBITEL.

FUENZALIDA, V. & JULIO, P. (2010). *La ficción audiovisual chilena en 2009.* Santiago: OBITEL.

GARCÍA-CANCLINI, N. (1995). *Consumidores y ciudadanos. Conflictos multiculturales de la globalización.* México D.F.: Grijalbo.

GILLES, D. (2003). *Media Psychology.* New Jersey: Lawrence Erlbaum Associates.

GIRARDI, G. (1997). Globalización, cultura educativa y su alternancia popular. *Éxodo, 39;* 14-27.

GONZÁLEZ, M. & MUÑOZ, J.M. (2002). La formación de ciudadanos críticos. Una apuesta por los medios. *Teoría Educativa, 14;* 207-233.

HALFORD, J.; GILLESPIE, J.; BROWN, V.; PONTIN, E. & DOVEY, T. (2004). Effects on Television Advertisements for Foods on Food Consumption in Children. *Appetite, 42;* 221-225.

KELLNER, D. & SHARE, J. (2007). Critical Media Literacy, Democracy, and the Reconstruction of Education. In MACEDO, D. & STEINBERG, S.R. (Eds.). *Media Literacy: A Reader.* New York: Peter Lang Publishing; 3-23.

LIVINGSTONE, S. (1999). Young People and the New Media: On Learning Lessons from TV to Apply to the PC. *Réseaux, 7(1);* 59-81.

LIVINGSTONE, S. (2004). What is Media Literacy? *Intermedia, 32 (3);* 18-20.

LIVINGSTONE, S. (2007). Engaging with Media - A Matter of Literacy? Paper presented at the *Transforming Audiences: Identity/creativity/everyday Life.* (http://eprints.lse.ac.uk/2763/1/engaging_with_media.pdf) (28-07-2011).

LIVINGSTONE, S. (2008). On the Future of Children's Television - A Matter of Crisis? In GARDAM. T. & LEVY, D. (Eds.). *The Price of Plurality: Choice, Diversity and Broadcasting Institutions in the Digital Age.* Oxford, UK: Reuters Institute for the Study of Journalism, Universidad de Oxford; 75-182.

LIVINGSTONE, S. & BOVILL, M. (1999). *Young People, New Media.* London: London School of Economics.

LOBSTEIN, T. & DIBB, S. (2005). Evidence of a Possible link between Obesogenic Food Advertising and Child Overweight. *Obesity Reviews, 6;* 203-208.

MARTA, C. & GABELAS, J. (2008). La televisión: Epicentro de la convergencia entre pantallas. *Enlace, 5 (1);* 11-23.

MARTÍN-BARBERO, J. (1987). *De los medios a las mediaciones: comunicación, cultura y hegemonía*. Barcelona: Gustavo Gili.

MARTÍN-BARBERO, J. (1996). Comunicación: el descentramiento de la modernidad. *Anàlisi, 19;* 79-94.

MARTÍN-BARBERO, J. (1999). Los descentramientos del arte y la comunicación. In OSSA, C. (Ed.). *La pantalla delirante*. Santiago: LOM.

MARTÍNEZ-SALANOVA, E. & PERALTA, I. (1998). Educación familiar y socialización con los medios de comunicación. *Comunicar, 10;* 41-51.

MCLUHAN, M. (1996). *Comprender los medios de comunicación*. Barcelona: Paidós.

MEDRANO, C.; AIRBE, A. & PALACIOS, S. (2010). El perfil de consumo televisivo en adolescentes, jóvenes y adultos: implicaciones para la educación. *Revista de Educación, 352;* 545-566.

MEDRANO, C.; PALACIOS, S. & AIERBE, A. (2007). Los hábitos y preferencias televisivas en jóvenes y adolescentes: Un estudio realizado en el País Vasco. *Revista Latina de Comunicación Social, 62;* 13-27.

OLIVARES, S.; YÁÑEZ, R. & DÍAZ, N. (2003). Publicidad de alimentos y conductas alimentarias en escolares de 5° a 8° Básico. *Revista Chilena de Nutrición, 30 (I);* 36-42.

PECORA, N.; MURRAY, J. & WARTELLA, E. (Eds.) (2007). *Children and Television: Fifty Years of Research*. Mahwah: Lawrence Erlbaum Associates.

SIERRA, F. & VÁZQUEZ, M. (Coords.) (2006). *La construcción del consenso. Revisitando el modelo de propaganda de Noam Chomsky y Edward S. Herman*. Madrid: Siranda.

TE'ENI-HARARI, T.; LEHMAN-WILZIG, S. & LAMPERT, S. (2009). The Importance of Product Involvement for Predicting Advertising Effectiveness among Young People. *International Journal of Advertising, 28 (2);* 203-229.

URIBE, R.; HIDALGO, V.; MARTÍNEZ, C. & MUÑOZ, R. (2006). La influencia de la publicidad televisiva en los niños: Qué sabemos del tema en Chile. *Revista Economía & Administración, 152;* 22-28.

VERA VILA, J. (2005). Medios de comunicación y socialización juvenil. *Revista de Estudios de Juventud, 68;* 19-31.

VILLANI, S. (2001). Impact of Media on Children and Adolescents: A 10-Year Review of the Research. *Journal of the American Academy of Child and Adolescent Psychiatry, 40 (4);* 392-401.

ZARANDONA, E.; BASTERRETXEA, J.; IDOYAGA, P. & RAMÍREZ, T. (2008). La alfabetización audiovisual entre adolescentes vascos: implicaciones para las prácticas educativas y propuesta de intervención. *Nueva Época, 9;* 119-143.

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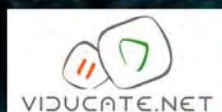# Comunicar
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