

Comunicar

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Curriculum and Teacher Training in Media Literacy



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39, XX

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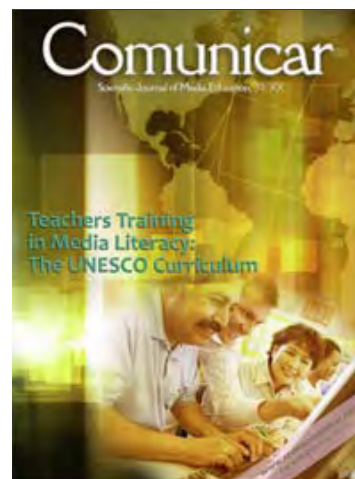
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Comunicar, 39, XX, 2012

Curriculum and Teacher Training in Media Education



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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 (600/630 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

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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.

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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

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Media proficiency, an educational initiative that cannot wait

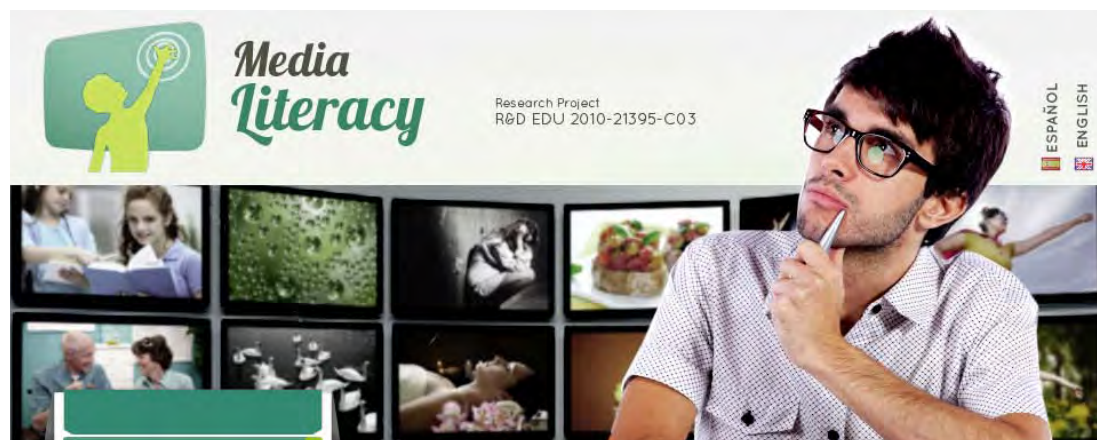
La competencia mediática, una acción educativa inaplazable

Dr. J. Ignacio Aguaded-Gómez

Editor

In these times of deep crisis, audiovisual communication is taking on an ever-increasing importance in the context of the digital society in which we live; communication technologies are present in all aspects of daily life and the consumption of media is growing and unstoppable, especially with the overwhelming presence of smartphones that have invaded all the spaces we move in. Videogames, televisions and computers in all their forms, and smartphones, are everywhere to the extent that the time spent in front of a screen by all sectors of society now takes up most of the leisure time of the citizens of all four corners of the world. Yet in the face of this barrage of media, citizens have developed few formative experiences for acquiring these audiovisual and media languages or for increasing their audiovisual and media skills. Neither education centres nor civic associations or the media...have encouraged the development of audiovisual proficiency as the key to fomenting critically and audiovisually «competent» citizens.

In 1977 Umberto Eco stated that «a democratic civilization will only save itself if it makes the language of the image into a stimulus for critical reflection and not an invitation to hypnosis». More than 30 years later, to be able to control the capabilities needed to encode and decode audiovisual messages has become a form of literacy as basic and fundamental as traditional reading and writing. The language of the image, fixed or in motion, must necessarily be a civic competence for creatively appropriating messages and avoiding potential manipulation. Technologies can now reach undreamed of limits, not only for their ability to broadcast images but also for their seductive potential, their subtly produced language and their insistent messages...By contrast, we cannot say the same of the efforts to educate citizens to see the image as a stimulus to critical reflection, rather it is based on the absurd scientifically demonstrated premise that media consumption is a guarantee in itself of audiovisual learning, when studies seem to indicate the opposite, that high media consumption leads to a loss of perspective and greater blurring between fiction/reality and the impairment of the ability to fully comprehend the messages.



Editorial

The mere consumption of media products is insufficient for acquiring an awareness of the reach of audiovisual content. Transforming the image into an opportunity to reflect critically enables an ability to distance oneself from one's own feelings, to know how to identify the motives behind the media's magic, to understand what is explicit and implicit in the stories and information...and above all to be able to establish coherent, critical relations between what appears on the screen and the reality of the world outside. And all this impossible without knowing the degree of audiovisual proficiency in citizens and their social possibilities in real contexts, in order to achieve an optimum level of preparedness.



The new generations of children and youngsters are of particular concern. As Prensky stated in 2001, when he coined the delightful description «digital natives», and wrote in «How Teens Use Media. A Nielsen Report on the Myths and Realities of Teen Media Trends» (2009) that «young people handle digital media with a lack, or very little, knowledge of the power of the audiovisual». Undoubtedly children and young people have set off along the digital path but without full knowledge of what the media are.

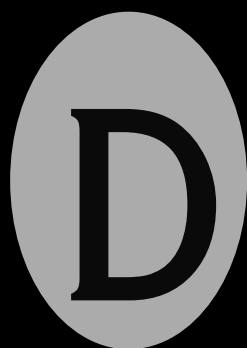
In general audiovisual proficiency is an underexplored field of study. There are few works that analyze how much we know or understand of all the elements that make up an audiovisual medium especially in terms of the more vulnerable segments such as infants and teenagers. The dizzying dynamic of change we are subjected to comes with an array of communication tools that children and youngsters use, and which are ever more complex and with new supports that update at great speed. Hence, in order to create educational programs that promote the understanding of audiovisual media and how they are produced, it is vital to start by knowing the extent of current levels of proficiency and to scientifically diagnose the real state of the question.

Since 2010, the Ministry of Economy and Competition has been developing a Coordinated I+D+i Project (www.competenciamediatica.es) to elaborate an integral conceptualization of the term «audiovisual competence» in the digital environment for use within different fields of intervention: the educational system, the media, universities...It is a fact that audiovisual communication competences are rarely ever assessed because they hardly ever get taught in a systematic way, and they are probably not taught because since they are not evaluated there is no awareness of the deficiencies in this field.

This study, in which 20 Spanish universities participate and which is coordinated by Joan Ferrés (Universitat Pompeu Fabra-Barcelona), Agustín García-Matilla (Universidad de Valladolid, Campus de Segovia) and Ignacio Aguaded (Universidad de Huelva-Spain) is justified on the grounds that there can be no effective evaluation systems without first defining the knowledge, skills and attitudes deemed necessary to have acquired to enable a citizen to be considered audiovisually proficient. So for the first time in Spain, we have set about detecting in a systematic and rigorous way the media needs and shortcomings of a significant sample of the population as well as planning global strategies and training programs for the government, the media and the different sectors involved: students, teachers, parents and society in general.



Comunicar 39



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Special Topic Issue

Curriculum and Teacher Training
in Media Education

Introduction

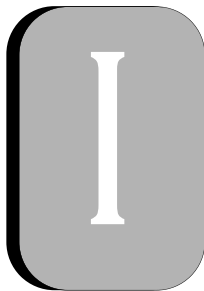
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Teacher Training in Media Education: Curriculum and International Experiences

Dr. José Manuel Pérez-Tornero

Full Professor at the Autonomous University of Barcelona (Spain)

Dr. Samy Tayie

Full Professor at the University of Cairo (Egypt)

In April 2008, Pérez-Tornero received an urgent commission from UNESCO to draft a text-base to develop a curriculum for teacher training in media and information literacy. There were already some precedents in the shape of previous work carried out by Pérez-Tornero for UNESCO. In 2002, in a joint UNESCO and European Commission project, MENTOR, Pérez-Tornero and Tayie led a group of international experts who prepared a media education curriculum for teachers in the Mediterranean area. In 2004, Pérez-Tornero conducted another study for the European Commission, promoting Digital Literacy, in which he stated the need to foster a change in media culture and communication skills for which the training of teachers was crucial. This issue had arisen in another study conducted by the same author, also for the European Commission («Study on Current Trends and Approaches to Media Literacy in Europe») in which teacher training and the development of a curriculum on media information literacy was deemed essential.

But there were other more significant precedents. In fact, since UNESCO began to deal with media education on an international level (the Grünwald Declaration in 1982 followed in 1990 by Toulouse; Vienna, 1999; Seville, 2002 and Paris, 2007), the need for a media education curriculum and teacher training has gained in urgency, supported by proposals from pioneering studies on the subject by Masterman, Pugente, Duncan, Balzaguette, Gonnet and others.

Why precisely in 2008 did UNESCO launch the idea of developing a global curriculum with regard to the training of teachers? Certainly, the reasons are many but some are truly striking: A) In 2008, the Summit of the Information Society of the United Nations (Geneva, 2002 and Tunis, 2005) had already been overtaken by the need to constitute societies of knowledge in which media and information literacy was to be decisive; B) At that time almost all education systems worldwide were undertaking curricular reforms that placed the development of student skills at the center of the system, among the most important being the digital skills related to new media; C) It was also unquestionably the time to integrate the Internet and ICTs in the classroom. For that reason, the renewal of skills and the training of teachers became a must; D) Furthermore, the development of Web 2.0 (whose concept emerged in 2004) was rendering obsolete the out-dated distinction between education's usage of the media, and education and its position with respect to the media, because for the first time media could be used in a general and creative way in terms of educational systems that was not just responsive. Teachers and students could now become producers, creators and communicators; E) At that time, the globalization of the media had taken such a giant step forward that upgrading universal education strategies

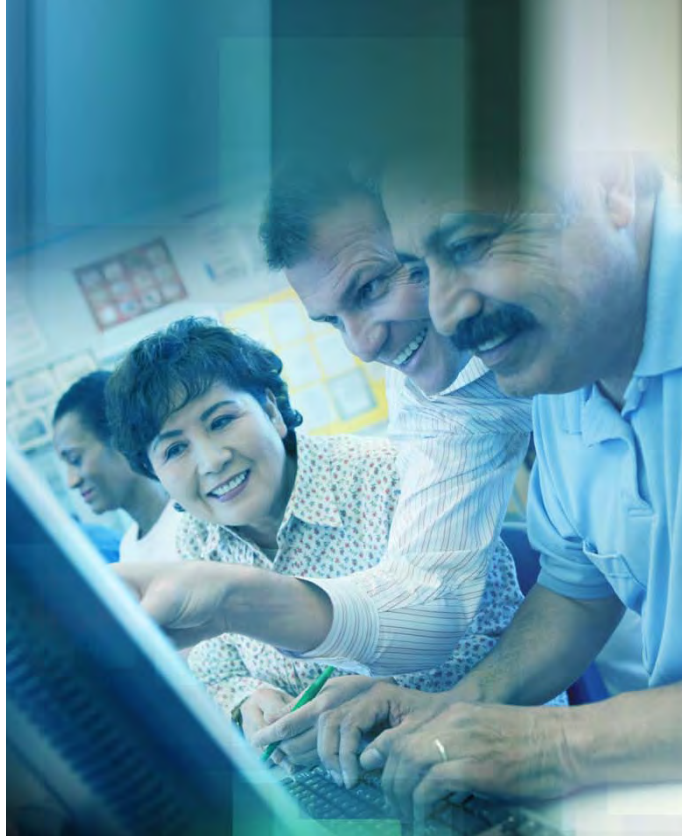
Introduction

could no longer remain unthinkable. Rather, it was deemed a necessity; F) In any case, and whatever the reasons, in 2008 the development, dissemination and testing of what is called «The Media and Information Literacy Curriculum for Teachers», was put into effect for the first time globally. And after three years of hard work, the full text of this curriculum, involving many international experts, was presented on July 1, 2011 in Fez (Morocco). Since then, more than a dozen countries have been developing their own adaptations of the curriculum and have been actively experimenting with their various proposals and recommendations.

This same forum in which the curriculum was presented also saw the launch of what would become the platform for developing academic research and development: the «UNITWIN Cooperation Program on Media and Information Literacy and Intercultural Dialogue», which is the result of an agreement between UNESCO and the United Nations Alliance of Civilizations and eight committed universities from around the world (those of Sao Paulo, in Latin America, Temple, representing North America, the Autonomous University of Barcelona, Europe, Cairo, in Africa, the University of the West Indies in the Caribbean, the Tsinghua University in Asia, the Queensland University of Technology in Oceania, and the Sidi Mohamed Ben Abdellah University in the Maghreb). This platform combines the mission to foster the development of this Curriculum with UNESCO to promote media and information literacy and to improve intercultural dialogue, thereby underlining that teacher training in media and information literacy will be a major challenge for the global education system at least for the next decade.

This current issue of «Comunicar» seeks to reflect on this universal challenge: the curriculum and teacher training in media and information literacy focus, although not exclusively, on the UNESCO Curriculum and on diverse experiences within the field of media and information literacy and teacher training development. This edition of the journal includes several texts on various strategies and teaching practices in media education.

The journal editors¹ have sought the assistance of experts and researchers from different latitudes and disciplinary approaches with a special invitation extended to members of the «UNITWIN: Cooperation Program on Media and Information Literacy and Intercultural Dialogue» as well as to experts involved in curriculum development for UNESCO and other prominent researchers actively working towards its development.



All these authors address issues and areas covered by the UNESCO Curriculum either directly or indirectly, and offer a broad overview of the key issues affecting teaching practices in media and information literacy. But before reading these texts, let us briefly present the structure of the UNESCO Curriculum in order to help the reader understand the articles presented in this edition.

The «UNESCO MIL Curriculum and Competency Framework» combines two distinct areas: media literacy and information literacy. The term used for this «umbrella» is: A) «Media and Information Literacy» (MIL). It aims to integrate the tradition of information literacy, engaged in issues such as information needs, access, location, evaluation, organization and the ethical use of information and information technology. Important sources to keep in mind are: The National Forum on Information Literacy (www.infolit.org), The Association of College and Research Libraries (ACRL) (www.ala.org/acd/nili/nilihp.html), The American Association of School Librarians (AASL) (www.ala.org/AASL/ip_nine.html); B) Media literacy. For a review of the current use of the definition of Media Literacy, Potter takes the European context to highlight the contribution of Zanchetti and Vardakas, traditionally focused on issues such as understanding the roles of the media, the critical interpretation of media content, individual expression as a form of democratic participation and the technological skills of media users to produce media content.

The integration of these different traditions is not only a new terminological convention but involves a qualitative leap forward in what has so far been the evolution of the relationship between communication and education. To stimulate this leap forward, the UNESCO Curriculum presents three positions:

The first of these, which the Curriculum calls «ecological vision», means the acceptance and recognition of the various media and informational environments related to media literacy. The second, which we could call «functional», means configuring the Curriculum's objectives and purpose. The third, we describe as «operational», is concerned with establishing an appropriate framework to guide and promote the work of students and teachers.

From the «ecological» standpoint the UNESCO Curriculum provides a list of areas and resources related to media and information literacy: film, television, Internet, books, freedom of expression, among others. While this list is imperfectly structured, as it is primarily descriptive and refers to various categories, it is valuable for orientating media literacy towards a very broad communication and media horizon by means of a holistic approach which is unrestricted in terms of covering all media types and formats as well as content and contexts.

It should be noted here that it has not always been evident whether media and information literacy relates to some or all media. Therefore, it is significant that UNESCO recognizes that media and information literacy can only be useful today if it accepts multimedia and cultural convergence with its emphasis on its multicultural dimension. It matches the position adopted by the European Commission Expert Group which assumes that media literacy relates to all media.

From our point of view, the advantages of this convergent and holistic approach would be enhanced if the UNESCO Curriculum recognized the distinct nature of the elements considered within the term «ecology». For this to occur, it would be sufficient to include in the Curriculum's proposals (and, therefore, in media and information literacy) the following conceptual categorization: 1) The media and support: film, television, Internet, books, computers and media in general; 2) Institutions: libraries; 3) Types of content: news, advertising, games; 4) Codes and technologies: digital and analogue; 5) Rights relating to the individual and public sphere, freedom of speech and information.

In fact, the justification for these categories is that media (defined as technologies and support) transmit and produce content of various types and formats and, at the same time, relate to formalized social contexts or institutions such as libraries, schools or political entities which, consequently, leads to the development of activities that are protected by laws or rights. It is this global focus on media that endows media literacy with a holistic approach.

In any case, with or without an organized structure, the Curriculum is a considerable leap forward in terms of approaches which, until very recently, had been jealously guarded as separate autonomies.

With respect to the operational framework, the UNESCO Curriculum's various components combine three themes: 1) Knowledge and understanding of media and information as key to the develop-

ment of democratic discourse and social participation; 2) the evaluation of media texts and sources of information; 3) The production and use of media and information.

Thus, the UNESCO Curriculum coincides with the approaches that Potter recognized as belonging to media literacy: skills, knowledge and social activity or practice.

The Curriculum also acknowledges, as a media literacy object, the presence of competence (as defined by the National Communication Association), that is to say, the capacity of the individual to process media content, and that aspect related to interaction and group participation through media and communication.

From this starting point, the focus of the Curriculum is on the following points: a) Knowledge of information and the media prior to the construction of a democratic discourse. b) Assessment and analysis of media and their content. c) Production and use of media. This can be summarized as two distinct aspects: analytical/critical, and productive/participative.

As readers will discover, most of these items figure in the articles of this edition of «Comunicar». Carolyn Wilson (Toronto, Canada) who, along with Alton Grizzle, is one of the original authors of the UNESCO Curriculum, carries out a systematic review and critique of this document. She analyzes in detail the global structure of the Curriculum, its coherence and organization, and considers each section to shed light on its pedagogical balance and educational objectives.

M^a Amor Pérez and Agueda Delgado (Huelva, Spain) deal with an aspect related to curriculum development: the approach of competence. They examine the differences between the concept of digital and audiovisual competence and media competence. They start with the educational curriculum in Spain and then analyze six international studies related to the topic of literacy, both digital and audiovisual, and after their discussion, provide a new framework as a guide to carrying out media education activities.

Ibrahim Saleh (Capetown, South Africa) studies the case of his country and its needs in the field of media education. Given the socio-educational situation in South Africa, Saleh presents and discusses the initiatives taken to promote media and information literacy, and points out their weaknesses and the strategies that can be adopted to increase efficiency. He concludes that the UNESCO Curriculum could help improve the current state of media and information literacy in South Africa.

The experimental study conducted by Susan Moeller (Maryland, USA) across five continents reveals a key fact: today's youth, regardless of the context in which they live, are highly addicted to media: they live with them and have real difficulties when trying to disconnect for longer than one day. Moeller's experiments have the added value of providing teachers with an exercise that helps to enhance young people's awareness of their own media practices and, consequently, improve their own media and information literacy.

The article by Samy Tayie, Manisha Pathak-Shelat and Irma Hirsjarvi (Cairo, Egypt; Wisconsin, USA and Helsinki, Finland) uses qualitative and comparative methodology to underline the fact that young people around the world are appropriating the new media, especially mobile phones and computers, to meet their own needs. And this phenomenon, according to the authors, is a global fact that transcends borders and countries, highlighted by the differences in media use between rural and urban areas. The children and youth of the countries studied (Argentina, Finland, Egypt and Kenya) exhibit a change in attitude towards the news media: they are not simply consumers who simply accept media content, but are becoming «prosumers», that is, active users who create content and actively participate in the new networks, according to their own interests. Therefore, the authors advocate advancing media education, media literacy and teacher training in these areas in order to instill in children and young people this new creative and participative attitude that is conscious, critical and autonomous.

Santiago Tejedor and Cristina Pulido (Barcelona, Spain) study how to empower children and youth in the face of possible risks on the Internet. They are especially concerned with «grooming» and cyberbullying. They note that these threats and risks are not uncommon: in Spain according to the data collected, 44% of children state that they have felt sexually harassed at some time, measured against 20% of children in the USA. They stress the need to follow the recommendations of the UNESCO Curriculum and insist on the importance of active strategies for prevention.

Sherri H. Culver and Thomas Jacobson (Philadelphia USA) see media literacy as a tool to promote

civic participation. They analyze experiences in three different contexts: a) Powerful Voices for Kids, an experience of the Media Education Lab at Temple University; b) the Salzburg Academy of Communication and Social Change, c) a World Link project entitled «Cultivating the Net Generation of Youth as Global Citizens and Media Literate Leaders in a Digital Age». In all these cases, the central concepts of the UNESCO Curriculum are seen to be highly effective.

Vitor Reia-Baptista has been involved in several European experiences in media education with film at its core. In so doing, he acknowledges the possibilities of the use of film in the improvement and deepening of the media and information literacy part of the UNESCO Curriculum.

Sara Pereira and Manuel Pinto (Porto, Portugal) present the results of a project entitled «Resources for media literacy», research that was developed at the Centre for Communication Studies and Society and funded by the Evens Foundation (Belgium). This is an intervention project that proposes pedagogical practices of reflection and learning about television, video games and the internet. The results demonstrate the importance of considering the different elements that can enrich students' critical competence.

Finally, Morella Alvarado (Caracas, Venezuela) proposes rules for developing critical reading of the media in schools. The objective is to develop in students a spirit of good citizenship, independence and autonomy to be able to understand the political and institutional contexts of the messages.

Notes

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Media and Information Literacy: Pedagogy and Possibilities

Alfabetización mediática e informacional: proyecciones didácticas

ABSTRACT

This paper will present an overview of UNESCO's Media and Information Literacy (MIL) Curriculum for Teachers. This overview includes an exploration of key program areas for trainers in order to teach key issues related to MIL and the competences needed for developing programs. These program areas include: a conceptual and organizational framework; production and use of information; media texts and information sources; evaluation and analysis; media audiences; democratic discourse and social participation; approaches for curriculum adaptation, and pedagogical approaches for the classroom (textual analysis, contextual analysis, case study, translation, simulation and production). After introducing these key areas of the program, the paper will conclude by offering recommendations for the successful development, adaptation and implementation of MIL Programs. Main recommendations are: curriculums leaders have to be available for training, support and consultation, promotion of teachers network who are implementing MIL initiatives, inclusion in official papers of educational curriculums, analyzing needs of the students before implementing modules of the curriculum, facilitating online resources for teachers, professionalizing MIL teachers, promoting collaboration between community members (family, teachers, students, other stakeholders), and finally research to identify best practices and new trends to be developed.

RESUMEN

Este artículo presenta una visión general del Currículo UNESCO de Alfabetización Mediática e Informacional (MIL) para profesores, mostrando las áreas clave y temas relevantes del programa, así como las competencias necesarias para desarrollar estrategias didácticas de alfabetización mediática. Las áreas incluyen: un marco conceptual y organizativo; producción y uso de la información; textos mediáticos y fuentes de información; su evaluación y análisis; audiencias mediáticas; debate y participación social; los modelos de adaptación del currículo, y los modelos pedagógicos a utilizar en el aula (análisis de texto, análisis del contexto, estudios de caso, traducción, simulación y producción). Una vez presentadas las áreas clave del programa, se presenta una serie de recomendaciones para el desarrollo, adaptación e implementación del Currículo UNESCO con éxito. Así se destaca que la importancia de la formación de los líderes; la importancia de los soportes y el asesoramiento; la promoción de redes de profesores implicados; inclusión de la alfabetización en los documentos oficiales educativos; el análisis de las necesidades de los estudiantes antes de la implementación de los módulos en el currículo; la urgencia de facilitar recursos on-line al profesorado; de profesionalizar el profesorado; de promover la colaboración entre los miembros de la comunidad (familias, profesorado, estudiantes, y otros agentes), y finalmente promover la investigación en alfabetización mediática para identificar las mejores prácticas y las nuevas tendencias en el campo de estudio.

KEYWORDS / PALABRAS CLAVE

Media literacy, information, pedagogy, democracy, technology, critical, curriculum.
Alfabetización mediática, información, pedagogía, democracia, tecnología, crítico, currículo.

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1. Introduction

In 2007, UNESCO's General Conference at its 34th session invited the Director-General to explore new initiatives to further support media and information literacy (MIL), with the overall objective of providing the opportunity for users to make informed judgments about media and information sources and broaden civic participation in the media. In 2011, UNESCO took a significant step in this direction: an MIL curriculum for teachers was introduced which would enable teachers to develop a greater understanding of the role of media, and information technology, in their own lives and in the lives of their students.

The MIL curriculum defines media and information literacy as «the essential competencies (knowledge, skills and attitudes) that allow citizens to engage with media and other information providers effectively, and develop critical thinking and life-long learning skills for socializing and becoming active citizens». MIL is concerned with the process of understanding and using media and other information providers, as well as information and communication technologies. It is concerned with helping teachers and students develop an informed and critical understanding of how various media and technologies operate, how they can be used, how they organize information and create meaning, and how to evaluate the information they present. MIL also involves the ethical use of media, information and technology, as well as participation in democratic and intercultural dialogue. MIL is both a content area and way of teaching and learning; it is not only about the acquisition of technical skills, but the development of a critical framework and approaches.

It is clear that in this information age, we need to embrace an expanded definition of literacy, one that includes print, screen-based and electronic media and information. MIL enables students, in the words of Freire and Macedo (1987), to «read the word and the world»: to understand the word on the page and the image on the screen, and to be able to analyze and assess the information and representations about our world that are conveyed to us through the media. For many educators, access to media and information literacy is a justice issue, as they recognize that print-based literacy will no longer provide students with the competencies needed for life and work today. Many educators recognize that without access to training in MIL, teachers and students will be significantly disadvantaged and disempowered. In the words of one educator from Namibia «We don't want our teachers and students to be left behind».

Several factors support the need for a critical and

coherent study of media and information literacy as part of teacher education. These factors include:

- The proliferation of global telecommunications as well as a concentration of media ownership and control (Karppinen, 2009).
- Studies completed in many industrialized countries that indicate young people spend more time involved with the media than they do any with other activity except sleeping (Roberts & Foehr, 2008).
- The need to create a level playing field between those who manufacture information in their own interests, and those who consume it innocently as news or entertainment. (Livingstone, 2002).
- The need to know how young people are interacting and creating projects through media to adapt MIL to their current needs (Dezuanni & Monroy, 2012).
- A consequent exponential increase in media texts and messages (of varying authority, purpose, currency and accuracy) (Wilson & al., 2011).
- The controls (overt and/or subtle) exerted over access to, and availability of, those texts and messages to citizens (Wilson & al., 2011).
- The recognition of communication rights as a third generation of human rights, which include rights to access and exchange of information, as well as access to those skills and discourses which will enable citizens to interpret, express and produce their own messages and communication (Abbott & Masterman, 1997).

The UNESCO curriculum on Media and Information Literacy is designed to support teachers in the development of critical questions and approaches related to the design, implementation and evaluation of Media and Information Literacy programs for secondary students. The curriculum offers an introductory and flexible syllabus for use in teacher education, one which offers various components of a media and information literacy program that can be selected, developed and adapted to meet the needs and capacities of each individual situation. The curriculum modules focus on such topics as New and Traditional Media, Representation, Media Languages, Audience, News Media and Information Ethics, Advertising, and Information Literacy and Library Skills. Within each module, teachers are provided with learning objectives, pedagogical approaches, and sample activities for working with secondary students.

The curriculum focuses on the theory and practice underpinning media and information literacy and offers a variety of entry points for teachers and students. The curriculum also outlines a number of MIL

goals and related teacher competencies in the areas of: policy development; curriculum and assessment; pedagogy; and teacher professional development. Several key competencies related to pedagogy and curriculum development include:

- Teachers must understand how media and information literacy might be utilized in the school curriculum.
- They must be able to critically assess media texts and information sources in light of the functions attributed to media and other information providers.
- They must acquire the pedagogical skills needed to teach media and information literacy to students.
- They must acquire knowledge about student interactions with, and response to, media as a first step in supporting their media-and information-literacy learning.
- Teachers must understand central concepts, tools of enquiry and structures of the discipline to create learning experiences that make these meaningful for students and prepare them for their role as citizens (Wilson, Grizzle & al., 2011: 29).

These competencies underpin the modules, units and themes in the curriculum, as well the suggested pedagogical approaches and activities found within each module.

2. Core competencies and the curriculum

The acquisition of MIL competencies for teachers is tied to the knowledge and understanding of several key program areas which are worth exploring in detail. These include: an organizing or conceptual framework; possible approaches for curriculum adaptation; pedagogical approaches for the classroom; recommendations for program planning and success. These key areas are described below.

2.1. Organizational framework

In utilizing the MIL curriculum, teacher competencies and curriculum development can be organized around 3 broad program areas which, in effect, represent 3 sides of a MIL «triangle». This MIL triangle (the origins of which can be traced to Eddie Dick and the Scottish Film council) includes the areas of Production, Text and Audience. This triangle can pro-

vide teachers with a framework for the development of curriculum planning (identifying what can be taught) and pedagogical approaches (how it can be taught).

2.1.1. Production and use of media and information

This program area encompasses the ways in which media and information texts are produced, and the political, economic and social contexts of this production. It includes the ways in which media and information technologies can be used, and the roles and responsibilities of media and information providers.

MIL competencies enable individuals to access, organize, and evaluate information, and to produce

MIL also involves the ethical use of media, information and technology, as well as participation in democratic and intercultural dialogue. MIL is both a content area and way of teaching and learning; it is not only about the acquisition of technical skills, but the development of a critical framework and approaches.

media and information texts. When we consider how texts are produced, we recognize that each medium or information source creates meaning differently using certain «vocabulary», techniques and styles, or codes and conventions. Developing MIL skills enable us not only to decode and understand media texts, but also to appreciate their unique aesthetic qualities, and to understand that each medium, or form, can influence and shape the content and information provided.

Examining the political, economic and social contexts involves an exploration of media ownership and control, as well as the role and functions of media and information providers in democratic societies. MIL also involves an awareness of the right to access information, as well as the importance of using information and technology ethically and responsibly to communicate with others. Today, technology enables individuals to participate in intercultural dialogue as members of a «global village». Within this «village», possibilities for global citizenship can be explored, as res-

possible use of media and technology moves users from critical autonomy to critical solidarity as they connect with people from around the world.

2.1.2. Media texts and information sources: evaluation and analysis

This program area focuses on the information, messages and values that are conveyed through various media and information sources. It recognizes the role of human agency in the production of media texts, and the fact that producers –both professional and amateur– have their own priorities and beliefs that can shape the messages and information we receive. Part of being media and information literate means that teachers and students can evaluate what information is

the ways in which meaning can be altered if the context, or elements of it, is changed.

2.1.3. Media audiences: democratic discourse and social participation

This program area addresses the potential political and social effects that can occur as a result of information conveyed through media and information sources, including the legitimization of political ideologies, societal values, and cultural dominance. This program area also emphasizes active citizenship – the right to access information and to participate in democratic discourse. It addresses the importance of international standards within local contexts, including the Universal Declaration of Human Rights (UDHR), and constitutional guarantees on freedom of expression as well as their limitations (such as hate speech, defamation and privacy rights).

This program area also recognizes the importance of examining and understanding individuals and groups as both target and active audiences. It involves understanding the ways in which audiences are targeted and positioned by media texts, and how media content can organize them into marketable groups. It involves understanding ways of communicating with an intended audience for a particular purpose, and knowing that audiences make use of inter-

pretive strategies as they respond to media and information. MIL recognizes that each person(s) interprets or negotiates messages and information differently based on age, culture, life experiences, values and beliefs, and acknowledges that audiences are capable of accepting certain messages and rejecting others, based on their own personal background, knowledge, and experience.

2.2. Curriculum adaptation

There are several approaches for teaching MIL and for organizing program content which are supported by this curriculum. The MIL curriculum has applications across a number of subject disciplines, and can contribute to a stand – alone or as an integrated program. Teachers may wish to make use of more than

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and is not included in media texts, whose voices are heard and whose are missing, who is represented in the media, and in what way. The MIL curriculum provides approaches for analyzing a variety of media and information texts, examining how they are produced, by whom, and for what purposes.

While the curriculum recognizes the need to develop skills for identifying and accessing information, it also recognizes the importance of analyzing the larger context in which information or a single media text exists. A news story is examined for the information and messages being conveyed, for example, but it is also analyzed in terms of the context of the news broadcast in which it appears.

The context is examined for its own construction, for the messages and values conveyed through it, and

one approach, depending on the needs and interests of their students, as well as local circumstances. Several potential approaches which could be utilized in working with the MIL curriculum are outlined below:

- A medium-based approach involves the study of a particular medium, such as the Internet, television or film. The key elements and characteristics of the medium are explored, including the ways in which the medium itself can influence or shape the content and information being conveyed. This approach also includes an exploration of the role and function of media and technologies in particular social or historical contexts.

- A thematic approach involves exploring a particular theme or topic across several media. A topic such as global citizenship or gender representation can be examined in terms of how effectively it is represented in a variety of media texts and information sources, and for its potential impact on audiences.

- A unit on MIL can be a stand-alone unit within a course. Teachers select a module, topic, or theme and students explore it intensively for two to three weeks.

- Integrating MIL into other areas of the curriculum is a holistic approach that can create authentic learning experiences for students. Because of the pervasiveness of media, information and technology in our society, it is often difficult to explore media and information literacy in isolation: analysis of documentary films is needed in history; media and gender representation should be part of sociology courses. The crucial point here is that all subject areas can benefit from teaching 'about' and not just 'through' the media, otherwise educators neglect the use of important critical tools of MIL (Wilson & Duncan, 2009: 134).

2.3. Pedagogical approaches

An essential recommendation for teaching MIL is that teachers see it not as a form of protection, but as an opportunity for preparing students for their roles as citizens and consumers, and for effective participation in democratic discourse. The experience of MIL should be one that engages students in a process of critical analysis, production and dialogue, rather than a process whose outcome and interpretation is controlled by the teacher.

It is also important in developing teachers' and students' competencies to begin where students are at. Learning about students' understanding and use of media and information technologies is an important starting point that will help to determine the most appropriate pedagogical approach for each classroom.

Within each pedagogical approach, activities in each of the modules should include appropriate scaffolding, so that learning is introduced in a step-by-step manner, with activities increasing in difficulty as students acquire the necessary skills and knowledge for each stage of the learning process. Each module should also include opportunities for meta-cognition, where teachers and students identify and reflect on the skills being used in each module, so that effective strategies can intentionally be applied to other situations. It is assumed that for each module, strategies and activities which engage the learner in analysis and production will also be developed. The curriculum identifies a number of pedagogical approaches for the teaching of MIL. Specific examples of these approaches, as well as strategies for analysis and production, are described below.

2.3.1. Textual analysis

This strategy is based on a detailed analysis of single media or information texts and involves a detailed description of key elements of the text, such as images, sound, font, vocabulary, types of camera angles, colour, etc (Rayner, Wall & Kruger, 2004). Students determine the meaning of a text based on connotations and associations invoked by various elements of the text. Based on an analysis of the «key ingredients» – technical and symbolic – and the messages being conveyed, judgments are also made about the text as a whole.

2.3.2. Contextual analysis

This strategy is based on examining the context for a particular media or information text. For example, student may examine the context of a website, as well as the text of a single news story present on that site; or they may examine the context of a political ad campaign, as well as the information conveyed through a single political advertisement. Examining context also requires consideration of the audience receiving the message, as well as those people responsible for producing it. It examines the importance of context in creating meaning: students explore how meaning changes when an image or piece of information is removed from its context. Student research can involve such topics as who produced a text, the business or industry involved in distributing it, various production roles involved, as well as the marketing and distribution of a particular text. Student work also involves researching and identifying the target audience, and investigating how and why audiences may have accepted or rejected particular texts.

2.3.3. Case study

The strategies used here can vary: students may focus on the production, marketing and consumption of a particular media or information text (often as an extension of contextual analysis); students could also conduct cross-media analysis of a particular issue or topic and its presentation in the media and through various information providers; they could focus on audience analysis through questionnaires, surveys etc., on a particular topic. Case studies can also involve the investigation of a single media company or information provider (such as a major global company or a smaller independent or local organization); the release of a feature film; the launch of a new ad campaign; the location and presentation of information in a library or museum; the role of media and information technology in Internet activism.

2.3.4. Translation

This involves the exploration of a particular issue or topic as it is taken up by or presented in various media forms. This can be done through analysis or production and helps students realize the possibilities and limitations of various media and information sources in conveying the depth and breadth of a complex topic or issue. The analysis here is textual and contextual.

2.3.5. Simulation

Simulation is an effective pedagogical approach to teach (Adcock & al., 2011). This strategy puts students into the position of media producers. This is particularly useful for addressing questions about production – about roles and processes within media industries, and about how producers balance ethical, financial, technical and institutional constraints in their work. For example, students could be required to select the most appropriate sources of information for particular purposes and access, retrieve and store the information. They could also develop search and interrogation strategies as they research and compile information. They could then be required to develop an outline for using the media to convey this information to a particular audience.

2.3.6. Production

Students work individually, or on teams, in the production of an original media or information text. Assignments should initially be small scale and manageable – i.e., a PSA (public service announcement) or an information brochure. Students are required to identify, access, and synthesize information, then

choose the medium through which they will be able to communicate their information and message most effectively. Student decision-making will help students reflect their purpose and audience, and on the representation of groups, individuals or events, that, in textual analysis only, may remain quite abstract. The «language» of a particular medium and its impact on meaning can also become more explicit here. Production should be linked to analysis and meta-cognition so that students are encouraged to be conscious of the production decisions they are making and the impact of these decisions. This also provides the opportunity to explore the relationship between intention and results, as well as the meaning that is constructed when various production elements come together (and sometimes in ways that students don't anticipate) (Buckingham, 2003).

3. MIL, differentiated instruction, and assessment

MIL, as stated earlier, it is both a content area and a way of teaching and learning. What is significant about the pedagogical approaches outlined here is that they also illustrate the ways in which MIL contributes to differentiated instruction. Differentiated instruction is based on the idea that because students differ significantly in their interests, learning styles, abilities and experiences, then pedagogical approaches and resources should vary as well (Ministry of Education, 2005). Differentiated instruction and the MIL curriculum facilitate all types of learners.

This means that teachers provide a variety of instruction/assessment strategies, challenge students at an appropriate level, and use a variety of student groupings to meet students needs (individual, partner, large and small group work). Differentiated Instruction is always aligned with student readiness (current knowledge, skill level and experience), interests (themes, topics and projects), and learning profiles (learning style, intelligence preference, gender and culture) (Ministry of Education, 2005).

The pedagogical approaches in the MIL curriculum recognize that students' learning profiles will vary; students may prefer auditory, visual, tactile, or kinesthetic modes of internalizing, processing, and communicating information. The approaches also recognize that differentiation can occur in terms of the way that content is presented to students, in the processes in which students become involved, and in what students are asked to produce to demonstrate their learning.

The pedagogical approaches and related teacher competencies for MIL also rely on different forms of

assessment: diagnostic, formative, and summative. Simply stated, diagnostic assessment, or assessment for learning, provides teachers with information about students' skills and knowledge before their instruction begins. It is based on this assessment that teachers will adapt the curriculum and develop their plans for instruction. Formative assessment, also referred to as assessment as learning, provides students and teachers with information about the learning while it is in progress. Students and teachers can implement any feedback provided to alter or adjust their learning and teaching strategies as necessary.

Summative assessment, or assessment of learning, is used to summarize learning at a particular point, and provides teachers and student with feedback about a final product, or what students have produced to demonstrate their learning (Ministry of Education, 2010). The curriculum provides opportunities for students to demonstrate knowledge and understanding, thinking and inquiry, communication, and application of MIL theory and practice.

4. Recommendations

The fact that media and information literacy programs have largely remained outside of teacher education and training programs at the same time as the media and information sources have come to dominate so many aspects of teachers' and students' lives, speaks to the challenges of moving teacher education into the present, and positioning it to embrace the future. While UNESCO's MIL curriculum marks a significant milestone in identifying and developing a program that is essential for teacher education today, there are several factors which should be considered in order to ensure its success and to maximize its impact.

1) Curriculum leaders need to be available for training, support and consultation, as institutions begin to adapt and implement the curriculum.

2) A subject association or network for teachers (local, national or international) should be established so that teachers who have been working in MIL can continue to collaborate, and teachers new to MIL can find support for their work.

3) There should be a focus on the development of relevant policy documents that will formalize the inclu-

sion of MIL in education for teachers and students, and support ongoing curriculum and teacher profession development.

4) Educators involved in teacher training will need to prioritize areas of the curriculum that will help to develop the necessary competencies for teachers. Identification of these competencies should be made by both the trainers and the teachers receiving the training, as the teachers will be able to recognize their own needs relative to their individual situations. Teachers at the secondary level will also be able to identify those areas that address the knowledge, skills and attitudes necessary for their students. In other words, decisions about the implementation of the curriculum will have to be made in consultation with teachers working in MIL on a daily basis, with secondary students.

It is clear that for teachers and students, media and information literacy is a life skill and one that is necessary to make informed decisions, affect change, and wield some degree of power over the decisions we make in our daily lives. It is perhaps in the areas of active citizenship and democratic discourse, in social participation and empowerment, that MIL can make the most significant contributions of all.

5) Teachers need access to resources that are relevant and copyright-cleared for classroom use, including relevant technologies and curriculum materials such as textbooks –on-line or in hard copy– Internet access, and audio-visual materials.

6) Ongoing professional development will be essential in order to address changes and developments in the field, and to respond with appropriate pedagogical strategies.

7) Collaboration between parents, students, teachers, administrators and media professionals is essential so that teachers who have been trained in MIL can share their expertise and experience with the larger community. A diversity of interested partners can provide essential support and resources for the program.

8) Research is required in MIL which focuses on

best practices, models for assessment and evaluation model curricula and student success.

It is commendable that UNESCO has offered this curriculum as a starting point for teacher education in MIL. MIL education should be seen as an essential component of teacher training programs – one that links the development of teacher competencies to helping students explore their media experiences and address their information needs in meaningful, authentic ways.

It is clear that for teachers and students, media and information literacy is a life skill and one that is necessary to make informed decisions, affect change, and wield some degree of power over the decisions we make in our daily lives. It is perhaps in the areas of active citizenship and democratic discourse, in social participation and empowerment, that MIL can make the most significant contributions of all.

The MIL curriculum document is an important step in ensuring a systematic approach to MIL education in schools. Ideally, successful adaption and implementation of the curriculum will result in a 'multiplier' effect, as teachers trained in MIL work with and train colleagues across programs and institutions.

In order for that to take place, the MIL curriculum has to be recognized as a beginning, not an end; as a set of ideas and approaches that outline the possibilities for addressing media and information literacy but that do not exhaust the field. The curriculum is the first step in introducing an essential, relevant program to teacher training institutions and to policy makers who, one hopes will take the necessary steps required to ensure that the important work of MIL continues.

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From Digital and Audiovisual Competence to Media Competence: Dimensions and indicators

De la competencia digital y audiovisual a la competencia mediática:
dimensiones e indicadores

ABSTRACT

The need to set out the conceptualization of media competence leads to a broader perspective in which there is a convergence of factors linked to the digital and audiovisual competences, both of which constitute the reference framework for «information processing and digital competence», which is the key competence in Spain's national curriculum. Despite the ongoing experiences in audiovisual and digital communication few attempts have been made to define the knowledge, skills and attitudes needed for a person to be deemed competent in these two areas, which are essential for the teaching and learning processes. This paper analyzes six important studies on digital and audiovisual literacy, considering issues such as the recipients, the conceptualization used in each study and the dimensions they suggest, the type of taxonomy, indicators...and the educational proposals: objectives, content, activities are systematized in a series of dimensions and indicators to define media literacy and design activities for a didactic proposal in accordance with the indicators established. The development of this research has led us to affirm the need for convergence in terminology and the expansion of resources based on the indicators defined, which affect the diverse areas of media literacy in an effective way and function to enable teaching actions among the various groups that comprise today's society.

RESUMEN

La necesidad de plantear la conceptualización de la competencia mediática conduce a una perspectiva más amplia en la que convergen aspectos vinculados a la competencia audiovisual y a la competencia digital. Ambas constituyen el marco de referencia de «El tratamiento de la información y competencia digital», competencia básica del currículo vigente en nuestro país. A pesar de las experiencias que se están llevando a cabo tanto en comunicación audiovisual como digital, aún son pocas las tentativas para definir, de manera precisa, los conocimientos, habilidades y actitudes necesarios para considerarse competente en sendos ámbitos, ineludibles a la hora de llevar a cabo los procesos de enseñanza-aprendizaje. Este trabajo parte del análisis de seis estudios significativos en la temática de alfabetización tanto digital como audiovisual. Considerando aspectos como los destinatarios, la conceptualización que se utiliza en cada uno de ellos, las dimensiones que plantean, el tipo de taxonomía, indicadores... y las propuestas didácticas: objetivos, contenidos, actividades, se sistematizan en una serie de dimensiones e indicadores para definir la competencia mediática y plantear el diseño de actividades para una propuesta didáctica de acuerdo a los indicadores establecidos. La investigación desarrollada nos ha permitido afirmar la necesidad de la convergencia terminológica, así como de la elaboración de recursos, a partir de los indicadores definidos, que incidan en los distintos ámbitos de la competencia mediática de una manera efectiva y sirvan para llevar a cabo actuaciones didácticas en los distintos grupos que componen la sociedad actual.

KEYWORDS / PALABRAS CLAVE

Media competence, key competences, digital competence, media literacy, dimensions and indicators.
Competencia mediática, competencia digital, alfabetización mediática, dimensiones e indicadores, didáctica.

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1. Introduction

Children and the youth of today develop new and uncontrolled skills, and ways to manage information and provide answers that differ from adults' views. This explains the relevance of the 'digital native' concept subscribed to by Prensky (2011; 2001). The new ways of dealing with information, to link concepts, to search, to express and ultimately, to think in a more visual, kaleidoscopic way, faster and more interactive than before, challenge the current pedagogical approaches followed at schools. Paradoxically, this development implies a confrontation with the traditional skills.

The speed of technological advances unquestionably affects teaching and generates changes in communicative processes. According to Buckingham (2006), «we urgently need to define a much more proactive role for the school as a key public sphere institution». And as the Delors report (1994: 91-103) states that «the 21st century offers unprecedented resources for information dissemination, information storage and for communication. These resources demand education to provide new requirements for a massive and efficient transmission of information, with more and more evolutionary, theoretical and technical competences at stake, as well as new approaches which need to be defined». Therefore, education «must provide the guidelines in a complex, changing world as a compass that guides us along the new paths».

Technologies and the media are complicating the traditional paths, and their presence in education is not systematized. As we observe, the implementation of new technologies has often been an exclusively political issue. Politicians provided schools with equipment that in many cases has not been used while promoting training courses for teachers... In any case, technological determinism does not imply a direct change in education. Attempts to consolidate coordinated projects in the curriculum, transforming the media and the new technologies into tools for learning, are usually unsuccessful. «Technology must not be an end in itself, and a significant use is necessary to overcome difficulties regarding its implementation in education, considering the purposes for its usage and establishing an integral pedagogical framework according to the needs of teachers, students and society» (Levis, 2006: 79).

According to Pérez-Tornero & Martínez-Cerdá (2011: 41-42), the paradoxical effect of technological advance and the inadequate citizenship training prove how diffusionist, economic and biased approaches leave aside changes in cultural attitudes and in the development of critical skills, creativity and the personal autonomy of individuals. Some of the investigations

in which we have participated confirm this paradox (Pérez-Rodríguez, Aguaded & Monescillo, 2010). In this sense, the development of media competence would support a new concept of education, fostering critical thinking, cooperation, dialogue and the production and management of new knowledge, the functionality of learning, tolerance and diversity.

In the late twentieth century, the concept of «competence» gradually emerges in the educational context, evolving towards a new perspective, from the traditional behavioural approach into a new approach closer to the social constructivism, including the skills needed to face the complex demands of specific contexts (Pérez-Gómez, 2007).

These basic competences were incorporated into the Spanish education system in 2006, with the appearance of the Organic Law of Education 2/2006. However, these initiatives first started to appear back in 1990, with the «World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs» (Jomtien, Thailand), ratified ten years later at the World Education Forum in Dakar. More recently, a working group appointed by the European Commission presented a report on «Education & Training 2010. Key competences» (OECD, 2005; European Commission, 2006).

There are interesting elements in competency-based education which are presented as new ways to approach and solve some of the current educational problems. One of the most interesting ideas is introduced by Perrenoud (2004), «the capacity to choose and use relevant content to face specific situations and problems», which is very useful when confronting current social challenges in education. This new approach should integrate the media and ICTs, fostering the development of critical skills, creativity and freedom of speech with no limits in format, time or space.

In accordance with the guidelines provided by the European Parliament, the Organic Law of Education 2/2006 (MEC, 2006) includes eight basic competences among which «information processing and digital competence» represent a significant acknowledgment of the initiatives carried out in Spain in the implementation of ICTs. Also in line with the European Parliament guidelines, the Spanish Organic Law of Education sets out some extra skills in relation to the information and communication process, as the main aim of this competence is to transform knowledge. In our opinion, this competence incorporates language and media proficiency, the decoding and transfer patterns used by the media and their subsequent comprehension, the critical approach, communication and deli-

very. According to the guidelines, «information does not automatically imply knowledge acquisition. Transforming information into knowledge requires thinking skills to organize, link, analyse, synthesise, infer and deduct information at different levels of complexity, also with prior knowledge. These skills also permit the transfer of the information using expressive resources, different languages, specific techniques and possibilities offered by the ICTs» (MEC, 2006). All these aspects need to be taken into account for the literacy required in the development of media competence.

Historically, the digital and audiovisual competences have been separate, with the latter focused on the knowledge, skills and attitudes related to the mass media and audiovisual language, and the former linked to searching abilities, processing, communication and information dissemination with technologies. Masterman (1993: 275-284) laid the groundwork for media education, highlighting the importance of audiovisual literacy, collaboration with families, teachers and media professionals, training programs for teachers and the creation of agencies to foster the interaction and integration of media education in schools. By the end of the twentieth century, technological development displaced the audiovisual, and many media education supporters thought that technologies would turn everything upside-down in education. However, nowadays the instrumental dimension of technology prevails over training practices, critical skills development and creativity.

The need to train to develop critical views towards the media remains a priority for the European Parliament and the European Commission. Many initiatives have been launched to pursue the goal of global media literacy in the educational environment (Audiovisual Media Services Directive, European Approach to media literacy in the digital environment, Commission Recommendation on Media Literacy, Mapping Media Education policies in the world: contributions and world challenges). In order to create a new concept of media literacy, it is important to com-

bine the educational and socio-cultural dimensions, the new digital competences and classic forms of literacy (reading and writing), and take into account the cultural transformation and the convergence of the media (Pérez-Tornero, 2004; Pérez-Tornero & Martínez Cerdá, 2011).

According to Spanish Directive 2007/65 «Media Literacy includes abilities, content and comprehension skills to interact efficiently and safely with the media. Competent users are able to choose and understand content, to optimise the opportunities offered by new

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technologies and to protect their families and themselves from offensive content». As digitalisation is the current trend today, it is necessary to consider the conceptual and terminological integration of digital and/or audiovisual literacy together with media literacy and, therefore, to propose dimensions and indicators to formulate a didactic and convergent approach.

2. Material and methods

After the analysis of six investigations on digital and media literacy, this study qualitatively describes the relevant aspects of each, focusing on the audience, the conceptualization used and the concept itself (audiovisual, digital or media literacy), the dimensions proposed, the taxonomy and indicators and the didactic proposals: objectives, content, activities... directly linked to the development of media competence. All this information permits us to introduce dimensions and indica-

tors for a convergent, didactic approach for the development of media competence.

According to currency, authorship, institutional support and other specific criteria, the sample selected comprises:

- An article by Area (2008) about the development of information and digital competences in order to train students to become autonomous, intelligent and critical in our current society, defending the use of technology in a new educational model, suggesting didactic activities according to three basic dimensions described in the competences.
- Research carried out by Celot & Pérez-Tornero (2009) on Media Literacy policies and the analysis, reflection and proposals on digital literacy in Europe,

La Mancha, Comunidad Valenciana, País Vasco, Murcia).

3. Outcomes

The information in these studies will help to systematize the concept of media competence, establishing dimensions and indicators from a convergent didactic approach. To this end, the elements analysed are the audience, the conceptualization or the underlying concept, the dimensions and indicators presented and the didactic proposals if applicable.

The Area study (2008) is aimed at teachers working with students to develop their informational and digital competences. The 'information competence' and 'digital competence' concepts are based on the

link they have with the current curriculum, as it has been demonstrated that by «separating both competences, as we used to do in the past, the approaches might be biased and simplistic». In this study, literacy in digital culture is presented as the best option in order to learn how to use hardware and software and «to develop cognitive skills for collecting information, understand content and produce information, for communication and social interaction with technology, developing values

Educational training is required in order to become competent, to be able to search for and discriminate information, to understand meaning and to express oneself with and through the media, to participate and interact, to communicate...Our research leads us to conclude that there is an increasing interest in information, focused on training teachers.

and attitudes to give moral, ideological and political meaning to the actions developed with technology». In relation to these dimensions, the study presents three different scopes for the development of information and digital competences that should be considered as a whole: 1) Information acquisition and comprehension; 2) Conveying and disseminating information and 3) Communication and social interaction. The didactic proposal is based on the principles of the New School and Freire's literacy theory adapted to educational practice with the support of ICTs. Generic didactic activities are proposed for the use of ICTs in the three established dimensions.

as a first system of indicators to determine the levels of media literacy.

- «Bloom's taxonomy in the digital era» (Churches, 2009), in which behaviours, actions and learning opportunities are analysed and new tools introduced for the new learning methods.
- The «Teacher Resource Guide» (Di Croce, 2009), whose aim is to develop new media skills in students to help them deconstruct media images and messages.
- A proposal by the Pompeu Fabra University in collaboration with the Audiovisual Council of Catalonia (Ferrés, 2007), with new dimensions and indicators to assess audiovisual competence.
- Contributions by Marquès (2009) on the integration of 39 items organized in 11 dimensions established in 2002 in the study presented by the «Consell Superior d'Avaluació del Sistema Educatiu de la Generalitat de Catalunya» together with seven other Spanish regions (Asturias, Baleares, Canarias, Castilla-

The research by Celot & Pérez-Tornero (2009) is aimed at assessing media literacy levels in Europe. Media literacy is presented as a concept «that includes the consideration of all media, traditional (analogue), novel (digital) and their convergence». Two dimensions are identified; the first is linked to the individual's capacity to use the media, divided in turn into indivi-

dual and social competences. The second dimension derives from a contextual analysis of the «environmental factors» of the field. Each dimension is distributed according to different criteria. Contextual factors include the following criteria: «availability of the media» and «context» (educational, legal, industrial and civil), and criteria related to individual skills regarding «use» (technical skills), «critical comprehension» (fluency in interpreting and comprehension) and «communicative skills» (the ability to establish social links through the media). According to this research, media literacy is the result of a dynamic process of availability, context and communicative skills, including the levels of media competence within the scope of the individual. Other components are also defined and presented as indicators to assess the level of media competence in Europe. There are no didactic proposals, but some recommendations for the curriculum that include the development of media competence, allocating resources for training teachers in media literacy, promoting the assessment of media competence in teachers and media training in the professional training programs.

Churches' work (2009) focuses on teachers and trainers in general. The conceptualization is linked to digital competence, and it begins with a classification of cognitive processes in learning (Bloom's taxonomy), adapted to include digital competence skills. There are six categories in ascending order: to remember, to understand, to apply, to analyse, to assess and to produce). Each of these categories comprises different skills. Collaboration and communication are presented as essential elements, and some digital activities are included for use in anyone of these dimensions, highlighting the importance of using tools to foster cooperation in students, such as wikis, blogs, collaborative tools, social networks...

The work by Di Croce (2009) consists of a guide to support teachers in the development of media literacy in students, helping them to assess consumer societies and the different responses of people towards information. The terminology used (Media Literacy) implies the convergence of traditional and digital media. It is, therefore, necessary to include it in the definition of the Media in the 21st century: Internet (websites, blogs, podcasts, RSS feeds and social networks), music and films, books (including e-books), comics, journals, advertising (billboards, branded products), cell-phones (and applications), video games and physical places (Coca-Cola store). Regarding the media literacy dimensions there are no classifications, but a series of key concepts of the media that refer to

the construction of reality, the negotiation of meaning, commercial, ideological, social and political implications, form, content and aesthetics. A list of activities is included to reflect on issues related to the media, as well as production activities that place students in the role of editors or which deconstruct adverts with the aim of assessing the information provided by the media.

Ferrés' research (2007) aims at «identifying objectives, processes and contents in audiovisual communication to be acquired and developed by students at the end of compulsory secondary education. These objectives, processes and contents would act as the foundations for the development of life-long learning. University curriculum content would serve to train future teachers and professionals in the audiovisual communication and information environments». The underlying concept of audiovisual competence is understood as the «ability to critically analyse and interpret images and audiovisual messages, and to communicate properly in the communicative environment. This competence is related to knowledge of the media and basic use of multimedia technologies». More specifically, this competence involves «mastering concepts, procedures and attitudes related to the six basic dimensions of Audiovisual Communication».

The six dimensions are interconnected and include indicators divided into two areas: analysis and delivery of information: language (codes and analysis skills for audiovisual messages); technology (theoretical knowledge and ability to use tools for audiovisual communication), production and programming processes (the work of the main agents in the process, ability to create audiovisual messages); ideology and values (comprehensive and critical reading and analysis of audiovisual messages); reception and audience (ability to recognise the active role of the audience and to critically evaluate emotional, rational and contextual elements in the reception of audiovisual messages); the aesthetic dimension (ability to analyse and assess audiovisual messages from an aesthetic point of view and the capacity to link them to other forms of artistic and media expression). In this research there are no explicit didactic proposals, but the objectives, processes and content are presented as part of the final product.

Marquès (2009) focuses on teachers involved in the development of competences among students. The «Digital competence» concept is defined as the «combination of knowledge, abilities and skills together with values and attitudes to reach objectives efficiently in different contexts with the support of digital tools.

This competence is framed within the mastery of five abilities related to the different dimensions of digital competence». Five dimensions are presented, each divided into five indicators: the learning dimension (transforming information into knowledge and information acquisition); the informational dimension (access, evaluation and treatment of information in digital environments); the communicative dimension (interpersonal and social communication); the digital culture dimension (social and cultural practices of the knowledge society and digital citizenship); the technological dimension (technological literacy and mastery of digital environments). These dimensions are embodied in five abilities related to the media and digital

The increasing exposure to information today is not associated to a growing development of critical analysis among viewers. According to studies by Aguaded et al. (2007), Aguaded et al. (2011) and Pérez-Tornero & Martínez-Cerdá (2011), technological or media equipment does not make citizens competent in that field. Educational training is required in order to become competent, to be able to search for and discriminate information, to understand meaning and to express oneself with and through the media, to participate and interact, to communicate... Our research leads us to conclude that there is an increasing interest in information, focused on training teachers, in the works by Area (2008), Churches (2009), Di Croce (2009), Ferrés (2007) and Marquès (2009). Ferrés (2007) also includes Spanish students in compulsory secondary education and future information and communication professionals. In general, all these works focus on formal education, but do not include references to other sectors of society, which are also part of the media society, but remain outside the literacy process (housewives, the elderly, the unemployed). Coinciding with Buckingham (2009), we underline the importance of this key aspect in relation to the changes needed in policies on and practices in media literacy.

To carry out didactic proposals that focus on media competence, it is necessary to deal with the procedures for accessing information, with the different languages that encode messages today, with the reception and comprehension of messages, the technology spreading this information, the production, policies and ideology of the media industry, citizen involvement and the creative dimension. In this sense, training citizens to be autonomous and critical towards the media and ICTs would be a success.

environments: learning and producing knowledge; obtaining, evaluating and organizing information in digital formats; communicating, interacting and collaborating in digital environments; acting in a responsible, safe and civic way; using and managing devices and digital work environments that would be useful for creating teaching and learning activities to foster digital competence development.

4. Discussion

Given the fact that skills related to the media, technology and information are necessary for citizens to become autonomous and continue learning, it is important to determine the dimensions and indicators needed to present an appropriate didactic proposal for the development of media competence.

According to our analysis, and concerning the terminological and conceptual questions, there are two differentiated tendencies: studies that refer to media literacy (Celot & Pérez-Tornero, 2009; Di Croce, 2009) bridging traditional media (TV, radio, newspapers) and new technologies; studies that describe digital competence (Marquès, 2009) or information and digital competence (Area, 2008), focusing on the development of digital competence: content, abilities and attitudes related to searching for and comprehension, communication, creation and dissemination of information using technologies. Ferrés (2007) introduces the concept of competence in audiovisual communication, including the technological dimension, but focuses on the use of these tools as a boost to audiovisual communication. Churches (2009) adapts the abilities related to digital competence to the cognitive processes of learning in

Bloom's taxonomy. It seems convenient to propose a terminological convergence together with the convergence of the media, as suggested by Pérez-Tornero (2004) in relation to socio-cultural aspects and conceptualized by the European Commission (2007; 2009).

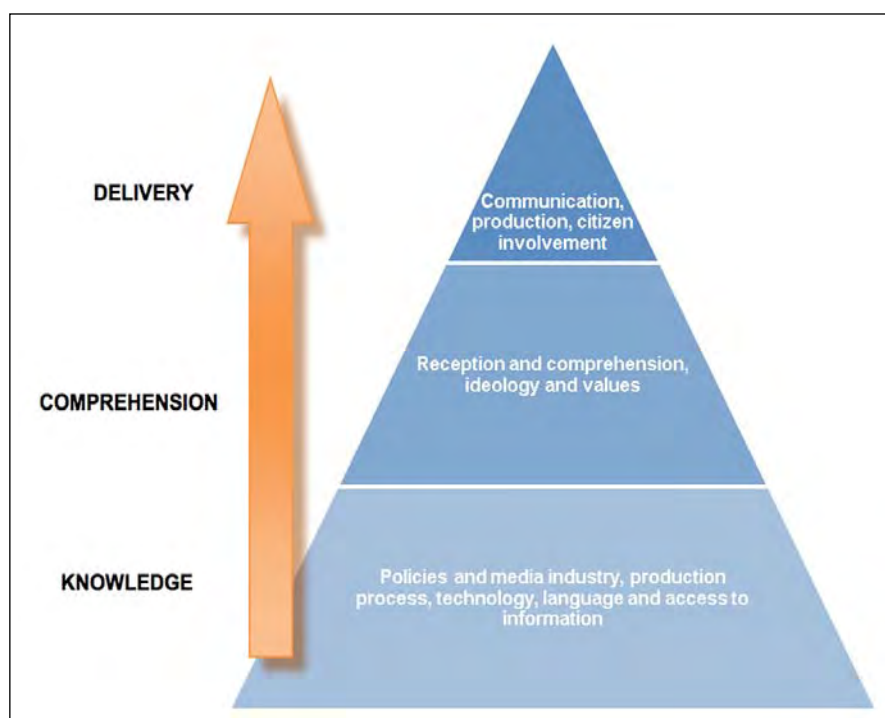
Regarding the dimensions detailed above, the proposals are diverse but there is a link between the works that describe the dimensions for media literacy (Celot & Pérez-Tornero, 2009) and those describing competence in audiovisual communication (Ferrés, 2007); and between those works that introduce the dimensions of digital competence (Area, 2008; Marquès, 2009). The main difference in the first group is the incorporation of contextual factors (Celot & Pérez-Tornero, 2009), while in Ferrés (2007) there appears to be only one dimension that refers to processes and production agents and no references to laws regulating the media or citizenship involvement. However, there is a reference to the dissociation of emotion and reason generated by images, one of the most important and least studied aspects of media education since the discovery of neuroscience (Damasio, 2005). It would be interesting to analyse the emergence of video games and the permanent connection and exposure to images in adolescent networks.

In «Study on Assessment Criteria for Media Literacy Levels», the indicators cited are more functional, and the criteria related to traditional digital competence are more integrated when compared to the «articulated proposal for dimensions and indicators in the audiovisual communication competence». As for digital competence, Area (2008) and Marquès (2009) both present dimensions related to the acquisition and comprehension of information, communication and social interaction, delivery and disse-

mination of information. Marquès (2009) introduces the digital culture dimensions, which include the social and cultural practices of the knowledge society and digital citizenship, the technological literacy dimension and the knowledge and mastery of digital environments.

Due to the divergence observed, our proposal would add to these dimensions and indicators the most relevant aspects for the development of media competence, with ten dimensions classified in a hierarchical pyramid in which the knowledge field would include policies and media industry, production processes, technology, language and access to information; the comprehension field would have reception and comprehension, ideology and values; and at the top of the pyramid, the delivery field would comprise communication, creation and citizen involvement. After defining a series of indicators for each of these dimensions, we would propose some general activities.

In this sense, only half of the works analysed offer didactic proposals. Area (2008) and Churches (2009) present general activities related to the dimensions or categories described, together with material or resources (Area) and digital tools (Churches). This trend is also evident in Bloom's taxonomy, where the activities proposed consist of defining, reciting and playing in a general sense, with no further specific didactic guidelines. However, in «Guide for Media Literacy» (Di



Croce, 2009) there are activities that focus on the development of media literacy, and the context is defined together with background, resources, types of questions...

In accordance with the dimensions described and the analysis carried out, the following activities are proposed for the development of media competence.

With this analysis, we would like to state that the development of media literacy involves a wider conceptualization regarding the concepts, procedures and attitudes needed to express and understand communication in technological or media supports. In consequence, to carry out didactic proposals that focus on media competence, it is necessary to deal with the procedures for accessing information, with the different languages that encode messages today, with the reception and comprehension of messages, the technology spreading this information, the production, policies and ideology of the media industry, citizen involvement and the creative dimension. In this sense, training citizens to be autonomous and critical towards the media and ICTs would be a success. We are aware of the fact that the analysis of six works can limit the results. Given the nature of technologies, their rapid changes and evolution require constant revision of the dimensions and indicators. In order to assess the efficiency of the classification proposed in this study, the creation of a specific didactic proposal and its application in a real context is our next goal.

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DIMENSIONS	ACTIVITIES
Access to information	<ul style="list-style-type: none"> • Topic-based search through search engines, defining and using the topics. • Access to databases, libraries, official websites... • Search information related to films, books...
Language	<ul style="list-style-type: none"> • Analysis of codes appearing in advertisements, films, chat conversations... • Making minor productions.
Technology	<ul style="list-style-type: none"> • Using different technological tools to create an audiovisual document.
Production process	<ul style="list-style-type: none"> • Deconstructing a program into phases. • Analysis of differences between live and recorded broadcasts.
Policy and media industry	<ul style="list-style-type: none"> • Simulating a complaint.
Ideology and values	<ul style="list-style-type: none"> • Analysis of the use of stereotypes in TV. • Analysis of the accuracy of websites.
Reception and comprehension	<ul style="list-style-type: none"> • Summary and organization of information through conceptual maps. • Analysis of feelings after programs or adverts.
Citizen involvement	<ul style="list-style-type: none"> • Role playing on participation profiles towards technology.
Production	<ul style="list-style-type: none"> • Film production with tools such as Movie Maker, Pinacle... • Podcast production. • Multimedia documents. • Blogs and wikis.
Communication	<ul style="list-style-type: none"> • Fostering discussion in virtual environments. • Collaborative e-projects. • Cooperation in carrying out activities using technological tools.

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Media and Information Literacy in South Africa: Goals and Tools

La educación en medios en Sudáfrica: Objetivos y herramientas

ABSTRACT

The South African government has emphasized the need to expand the role of media education to promote equal access, with a level of quality and relevance that will empower disadvantaged groups. However, it is a challenging, time-consuming process, as well as requiring considerable and consistent expenditure and partnerships between many donor agencies. There is little research on the causes behind unequal access to technology, or comparative studies of the barriers that impede the diffusion and adoption of media and information literacy in South Africa. It is thus not surprising that the media and information literacy component is still missing from the agenda that lists Africa's myriad problems, as well as the absence of qualified teachers, training for the trainers and the presence of IT literacy in the curricula, all of which are essential elements for any future development. The UNESCO model of curricula could help close the digital divide and promote social inclusion. As a contribution to that goal, this study investigates some of the pertinent issues related to media and information literacy via a sample of students at the University of Cape Town. This research offers some practical solutions on how to help raise the levels of media and information literacy among the disadvantaged, in the case in South Africa.

RESUMEN

El gobierno de Sudáfrica ha realizado recientemente un enorme esfuerzo en la expansión del papel de la educación en medios, con el objeto de ofrecer un acceso equitativo y de calidad a toda la población, especialmente hacia los grupos desfavorecidos. Sin embargo, este proceso requiere tiempo y recursos ingentes y constantes, además de la necesaria colaboración de otras instituciones. Actualmente, existe en Sudáfrica escasa investigación sobre las causas de las desigualdades de acceso a la tecnología o los obstáculos que existen para la difusión y puesta en marcha de la alfabetización mediática en Sudáfrica. No es sorprendente, por ello, que entre los múltiples problemas que existen hoy en África todavía la alfabetización mediática e informacional no sea una prioridad. Siguen existiendo muchos maestros con escasos conocimientos en esta materia, la capacitación de formadores es muy pobre y su incorporación en programas de alfabetización muy anecdótica. El Currículum UNESCO MIL de Alfabetización Mediática es un reto para ayudar a superar esta brecha digital y promover la inclusión social. Con este objetivo, este estudio analiza algunas cuestiones relacionadas con la alfabetización mediática a partir de una muestra de estudiantes de la Universidad de Cape Town, proponiendo algunas soluciones prácticas sobre cómo ayudar a mejorar los niveles de alfabetización mediática e informacional en las sociedades menos favorecidas, como es el caso de Sudáfrica.

KEYWORDS / PALABRAS CLAVE

Media literacy, information literacy, community, development, prospects, digital divide, policy.
Alfabetización mediática, alfabetización informacional, comunidad, desarrollo, perspectivas, división digital, política.

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1. Introduction

A historical perspective shows that the present technological revolution is transforming the social topography of our very existence. This transformation is largely facilitated by information and communication technologies (ICTs) with the ability to store, transfer, process and disseminate data (Singh, 2010).

The nature of information literacy in Africa can be determined by changing technologies. Internet can affect the degree of access to forums in terms of topics discussed, the influence these digital forums have on information literacy and the extent to which they replicate or differ from the affective and emotive manifestations of public interaction in the «real» world.

The perception that ICTs are a critical ingredient for media governance in Africa has resulted in various initiatives that are meant to strengthen civil society, assure transparency in government and make it easier for citizens, and the youth in particular, to access information, engage in democratic discourse and affect the direction of policy (Kedzie, 1997).

This dream to offer media and information literacy to all young people to eliminate or at least lessen educational inequalities, and the subsequent rippling effect on the workplace and society, is still too utopian to attain on practical terms (Saleh, 2003).

The accessibility of information through affordable technology can certainly empower people's ability to be economically viable, as a result enhancing the economic growth of countries in Africa. This is clearly captured in the MIL curriculum developed by UNESCO that defines the essential competencies and skills needed to equip citizens to engage with media and information systems effectively and to develop critical thinking and life-long learning skills to socialize and become active citizens. However, the prospects and concerns of such models are directly affected by restricted budgets, as well as the absence of qualified teachers, training for the trainers and the induction of media and information literacy into the curricula, all of which remain essential elements for any social development. The lack of telecommunications infrastructure, computers and connectivity, the high costs and the absence of awareness of the possible implications, the lack of related skills and support and attitudinal barriers are all blocks to development (Ott & Rosser, 2000).

In this dim reality, media information and literacy could be the only remaining refuge to attain education progress, and offer practical solutions governance based on citizens' participation to inform and motivate a «mass of people with a low rate of literacy and income, and the socio-economic attributes that go with it»

(Hameso, 2002). This deferred dream is affected by the level of investments in technology, in computers and networks.

This general dim reality is even more pessimistic in Africa with its widening wealth gap between small, politically connected elite and the majority unemployed, homeless and impoverished masses.

Africa's myriad of problems includes corruption, human rights violations, and internal conflict that have deemed political freedom and democracy of being a big failure and resonated with the exclusion of ethnic minorities from political processes (Rothchild, 2000).

South Africa's present status quo is influenced by its historical memory of slavery and colonial rule, which in turn delayed its educational revival, arbitrarily carved boundaries and disregarded social and natural divisions of geography and population settlement harnessed in many cases a profound national identity crisis and conflicts (Ott & Rosser, 2000).

In a recent national study that attempts to map the level of literacy in primary schools, the majority of learners in Grade (3) and Grade (6) do not read and count. For example, in the Gauteng province (70%) of the province's Grade (3) learners was found to be illiterate.

This happens at a time that the South African government has laid enormous stress on expanding the role of media education to embrace both formal and non-formal sectors, though the process remains very time consuming and carries heavy recurrent and non-recurrent expenditures, as well as has a dire need for partnerships between many donor agencies.

Historically, very little effort was directed towards understanding the digital divide and the asymmetries of critical issues such as poverty, HIV, conflict, peace, security, education and IT literacy development (Ernst, Mystelka & Gianiatos, 1998).

In the South African case, there are a number of local hurdles; namely, teachers' struggle to maintain their motivation levels; students' appalling discipline and attendance; parents' disengagement in the students learning environment; principals and teachers' overwhelming with departmental admin. But the absence of concrete plans in the light of a plagued system by ad-hoc requests and regular goal-post changes in particular within the context of racial, class and gender disparities.

This research draws on the author's experience as an educator and trainer in South Africa and the Middle East, while referring to the UNESCO Training the Trainers (TTT) in Information Literacy (IL) curriculum. This goal could incorporate interacti-

ve computer technology to meet the educational requirements of the deprived, displaced and remotely located, economically weaker population to overcome the current iceberg and enable a breakthrough in the community-building mechanisms of the internet (Quebral, 1975).

However, it is thus important to differentiate between digital divide as a theory, and repercussions of its prevalence as a technological problem between those who do and those who do not have physical access.

The significance of this divide is its bipolar explanation to internet access, where the Internet is a prerequisite for overcoming inequality in a society which dominant functions and social groups are increasingly organized around the Internet (Van Dijk, 2005).

As such, the research attempts to set the parameters of the possible effects of the use of media information and literacy to stipulate critical participation in an independent way within a shared domain in which issues could be engaged (Habermas, 1991).

To serve that goal, some of the key clues and indicators of media and information literacy are discussed, then the findings of a pilot study is evaluated of a sample of young learners in South Africa.

Though findings cannot be generalized, the research might help provide some indicators on how information and media literacy stand and how these communities operate and how the youth perceive the related challenges.

2. Literature review

A critical goal of the study was to evaluate how ICT can enhance information literacy among the younger generations as a result of its possibility to offer unlimited from which democracy in the larger society can be engendered and/or reinvigorated.

History must be weighed very carefully to reassess the earlier projections of its impact as developing societies were too optimistic about the endless possibilities for communication and networking prospects (Castells, 2002).

In this section, the researcher aims to identify some

of the trends and developments within the literature on the subject matter in Africa, especially in South Africa.

A departure point is to acknowledge the close connection between social and economic advancement on one hand, and the media and information literacy creation, dissemination, and utilization on the other hand (Baliamoune, 2003).

Internet penetration rates in 1997 in North America were (267) times greater than in Africa. Three years later, i.e., by October 2000, the gap had grown to a multiple of 540. Africa (14.1%) of the world popula-

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tion has only an estimated (2.6%) of the world Internet users.

Until March 2006, only three countries of Africa's (57) countries (54 official and three non-official states) had an access rate higher than the worldwide internet usage rate of (15.7%) including the Reunion (25.3%), Saint Helena (20.4%), & Seychelles (23.8%) (Fuchs & Horak, 2008).

As such, media and information literacy in Africa was very slow and was severely delayed as a result of the limited infrastructure, lack of local content and the overall low-income levels.

Communities can only be empowered when they become able to take control of their local knowledge management disparities and target the groups that are most marginalized (Fuchs and Horak, 2008). According to Mundy and Sultan information is useful «only if it is available, if the users have access to it, in

the appropriate form and language, if it is communicated, if it circulates among the various users with appropriate facilities, if it is exchanged» (Mundy & Sultan, 2001).

Several extensive studies emphasized the fact there is a very positive correlation between media and information literacy and civic engagement. According to the ITU's (2003) «ICT Markets and Trends Report» of 2007 only (3.8%) of the world's Internet users are situated in Africa. The report estimates (55%) of the population in Sub-Saharan Africa are unconnected without access to fixed, mobile and/or data services.

The New Partnership for African Development

Several extensive studies emphasized the fact there is a very positive correlation between media and information literacy and civic engagement. According to the ITU's (2003) «ICT Markets and Trends Report» of 2007 only (3.8%) of the world's Internet users are situated in Africa. The report estimates (55%) of the population in Sub-Saharan Africa are unconnected without access to fixed, mobile and/or data services.

(NEPAD), in 2001, established with the assignment of accelerating the development of African inter-country, intra-country and global connectivity (Harindranath & Sein, 2007). However, many studies confirmed the remaining gap between those who are able to access the internet and services that have become necessary for effective citizenry and those who are not able to, has widened (Katiti, 2010).

In a study titled «The Integrated Self-Determination and Self-Efficacy Theories of ICT Training and Use: The Case of the Socio-Economically Disadvantaged» concluded that physical access through infrastructure is not enough to overcome the limited ICT penetration in Africa (Techatassanasoontorn, & Tanvisuth, 2008).

The Swedish Department of Empowerment documented the fact that infrastructural limitations on internet usage in Africa still works as a pull factor against enhancing development, but the lack of digital

literacy and skills premium stand out a real iceberg blocking development among different African countries, and even within the social fabrics in Africa.

The Institute for Research on Innovation and Technology Management during the 1995-2003 period showed that countries privatizing their telecommunication sector enjoy a higher degree of media and information literacy expansion and digital freedom (Rahman, 2006).

Many studies highlighted the fact that media and information literacy could accelerate progress and bypass the processes of accumulation of human capacities and fixed investment; which in turn could help narrow the gaps in productivity and output that separate industrialized and developing countries (Steinmueller, 2001).

The World Bank has also funded many projects to serve that purpose since 1995 to improve the quality of life of Africans through media and information literacy, by implementing it as a tool to improve the socio-economic, political or cultural conditions. In addition, the Association for Progressive Communications (APC) is sponsoring a project titled «Communication for Influence in Central, East and West Africa» (CICEWA) to assess the impact of media and infor-

mation literacy on maximizing development (Wanjiku, 2009).

This of course besides the «World Summit on the Information Society» (WSIS) Plan of Action that aims to connect rural villages with media and information literacy and establish community access points (Gillwald & Lisham, 2007), however, the goal of finding out the exact number of rural villages in Africa is by itself a great challenge.

It seeks to overcome the permanent barrier that exists for the implementation of media and information literacy and that lies in part in the discrepancies between ideas and theoretical models and its implementation, as well as in the existing inequalities, still a sad reality for the asymmetric generation and empowerment of specific groups (Gregson and Bucy, 2001).

For example, at the school levels a total of (68,662) students, (2,627) teachers, (217) school administrators, and (428) additional education stake-

Africa Region	Population (2009 Est)	Pop % In World	Internet Users Latest Data	Penetration (% Population)	Use Growth (2000-2009)	% Users in the world
Total for Africa	991,002,342	14.6	65,903,900	6.7	1,359.9	3.9
Rest for World	5,776,802,866	85.4	1,602,966,508	27.7	349.7	96.1
World Total	6,767,805,208	100.0	1,668,870,408	24.7	362.3	100.0

Table 1: Internet users and population statistics for Africa (US Census Bureau, 2009).

holders in West and Central Africa participated in the study, only (17%) involved subject-specific media and information literacy for teaching and learning purposes» (Karsenti & Ngamo, 2007). This happens at a time, when media and information literacy could open up opportunities for citizens to participate in the public sphere through what is described as «media participation» (Tettey, 2002).

Many studies referred to the social, ideological (racism), and economic factors that resulted with structural inequalities in South Africa. The UNHCR (2005) calculated that (34.1%) of the South African population lives on less than (\$2) per day, the life expectancy at birth decreased to (49.0) years in 2000-05, the public expenditures on education decreased to (5.3%) of the GDP in 2000-02, and South Africa is listed as number (9) of countries with the highest income inequality that resulted with very high crime rate (UNHCR, 2005).

South Africa has nine provinces, three of which are considered thriving media and information literacy clusters: Gauteng, the Western Cape, and KwaZulu Natal, there is no significant relationship between telecommunication investments on the one hand and on the other hand Internet usage or PC usage. Although private annual telecommunication investment after a first increase decreased, Internet and PC usage increased in South Africa during the last decade.

In South Africa, it is given a priority on the national level to consolidate democracy and human rights through citizens' increased accessibility to information as well as increased opportunities for communicating freely with each other on matters of civic importance (Tlabela, Roodt, Paterson & Weir-Smith, 2007). However, there are still significant challenges facing media and information literacy to reduce the differences in access between social groups, thereby extending the benefits of technology to all sectors of the grassroots (ITU, 2003).

At the end of this section, one has to be careful about the foregoing discussion support Ott's

(1998) admonishment to attenuate the utopian enthusiasm about the democratizing impact of ICTs in Africa. Nonetheless, there is minimal impact in the numbers and categories of those who engage in and hence influence the direction of information literacy on the continent. The majority of the «publics» including the new generation are the marginalized segments of society, who are still unable to rupture the nature of literacy through ICTs because of economic, language or other constraints.

3. Methodology

In this section, the research refers to some of the latest data base indicators to how media and information literacy stands in South Africa, and then taking a case study from the University of Cape Town on issues of DC++ among young elite students.

In the first stage of the analysis, data are drawn from the Internet Usage and Population Statistics of World Stats, only (6.7%) have Internet penetration in Africa, which represent (3.9%) of the total world users. In this setting, two-thirds of people reside in rural areas with less than (4%) having a fixed line telephone connection. The statistical data show that almost all African countries with very low Internet access are among the least developed countries in the world in terms of health, education, and income. As such, a close correlation between global social gaps and the global digital divide.

In table 1, one could easily correlate between clustering of low values for both Digital Access Index (DAI)¹ and Human Development Index (HDI)² in Africa. This clustering lends further weight to the idea that both the HDI and DAI have a strong spatial component.

In table 2, media and information literacy is taking a very unequal development. Internet access and experiences of new media vary in the nature of consumption giving priority to mobile phones at the

Regions	Telephone line	Internet	Computers	Mobile
North Africa	38	3	6	26
Sub-Saharan	12	1.4	1	5

Table 2: Different New Media consumption in Africa (US Census Bureau, 2009).

Country Case	Population Estimate	Internet users, Latest data	Penetration (% Population)	UN human development rank
South Africa	48,861,805	3,600,000	7.4	120

Table 3: Internet access and human development (US Census Bureau, 2009).

expense of Internet access and computers. Hence, the socioeconomic status in Africa is an important predictor of how people are incorporating the Web into their everyday lives and even with regard to the nature of these activities.

In table 3, statistics indicate a strong correlation between the ability of individuals in a country to adopt media and information literacy and the level of development in the same country or region. This finding supports the statistical hypothesis between development and information and communication technologies.

And in the second stage, a pilot study is based on a sample of UCT students, who were surveyed to question their knowledge, perception of the possibilities, and challenges facing media and information literacy. It is a multi-method approach mixing surveys (120 subjects) and intensive interviews. It was very high response rate, as (100) respondents gave back the survey.

In many youth circles, DC++ has become a rea-

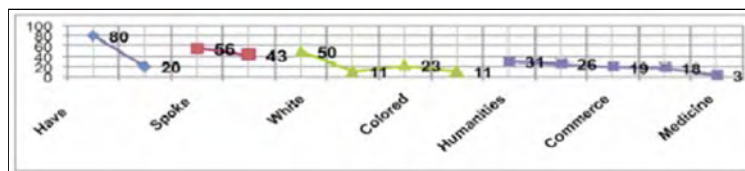


Figure 1: Demographics.

lity, which simply means is a free and open-source, peer-to-peer file-sharing client that can be used to connect to the Direct Connect network or to the ADC protocol. Modified versions of DC++, based on DC++'s source code were developed for specialized communities (e.g. music-sharing communities), or in order to support specific experimental features (Ullner, 2008).

In this initial stage of the research application, a purposive non-probability sample was drawn from students in the University of Cape Town (UCT) in different faculties among graduate and undergraduate students to engage in piracy while being DC++ users³. The study was conducted in

the sample had access with a majority of speaking English (56%), while (50%) were white from the faculty of humanities (31%), and (26%) from the faculty of Engineering).

In figure 2, findings indicated that the majority of the students (46%) had moderate knowledge of DC++, while only (15%) are in the high knowledge category.

In figure 3, findings indicated that (61%) of the students were generally users. The results emphasized that only (21%) used DC++ on daily bases, while the majority (35%) used it once a month.

In figure 4, findings indicated that (90%) of the students used unlicensed items, while (97%) of the sample indicated that they used unlicensed items as a result of cost reasons.

In figure 5, findings projected a split between the students who agreed to implement any deterring (53%), while (47%) disagreed. Besides, the sample had a divergence on the reasons for deterring as (70%) relate to person downloading, while (67%) admitted of their conscious awareness of the violations.

The regression results of the tables have the expected sign with the exception of the openness variable, which has a negative coefficient in most of the estimations. As such, the information literacy variables as in the case of (DC++) variable generally has a negative coefficient that complies with the findings of many previous stu-

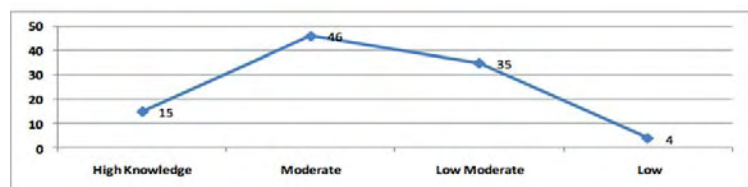


Figure 2: Level of Knowledge.

dies in that regard such as that of Thompson and Rushing (1999) who indicated that strengthening patent protection has a positive effect only in countries that have a high GDP per capita (above \$4000.00). The results suggest an urgent need for absorptive capacity policies among youth, by investing in educa-

April 2011.

In figure 1, findings indicated that (80%) of

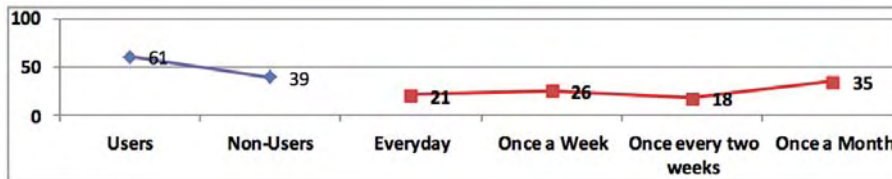


Figure 3: Number of DC++ users in relation to the frequency.

tion, information and communications technology, while advocating for relevant ideas of information property rights.

Though, findings cannot be generalized, the research stands out as a pilot study to set the scene with regard to media and information literacy levels of awareness, motivations and assessment among students, who are privileged elite and minority having internet access and skills. The main criteria for the sample selection were: UCT students, who access and use their computers on daily bases.

4. Discussion

This research has explored the emergence and interpretation of ICT among young learners in the 'new' South Africa. Through utilising a framework of contrasting «goals» and «tools», it has sought to expose the shortcomings and contradictions in the implementation of ICT among youth as a result of either government legislation and the vagueness of rhetoric targeted at the implementation of ICT policy.

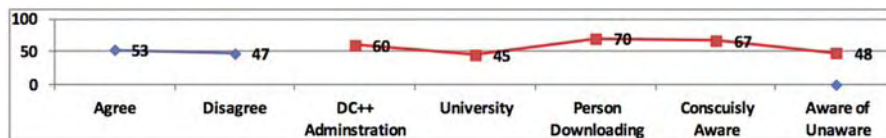


Figure 5: The suitable deterring Factors.

Having young students, in particular in Africa, being media literate is essential to achieve any economic, social and political development. If the youth are information literate, then they will be able to locate information and use it to acquire more skills and competencies.

But one of the major problems is that incorporating media and information literacy has not been put in place policies and mechanisms to address the serious

serve the disadvantaged majority.

Media have to restore their original feisty, robust, fearless mission, by offering discourse that can be trusted with a continuous process of inclusion of all societal colors to complement the curricula that have been based on wrong information with the aim bridging the digital divide.

Media and information literacy not only requires

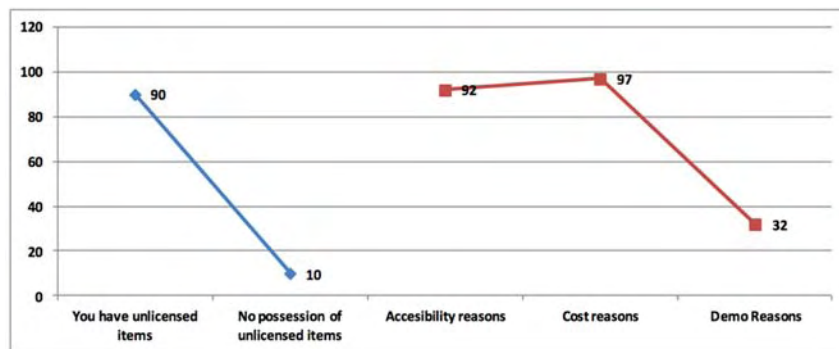


Figure 4: Motivating Factors.

gathering reams of statistics from teachers that cannot improve literacy, but also increases the quality of teachers' time with students. In that regard, fudging the «matric pass rate» statistics annually may make certain individuals look good but it clearly does not measure knowledge, literacy or numeracy currently.

It is also very common in many of the African countries including South Africa of either not reading carefully the statistics, or trying to project a positive frame about the country that is motivated, by pride, or lack of knowledge, or even clash of interest.

The different indicators emphasized the close links and connections between the improvement of media and information literacy and education on one hand, and with the improvement of teacher quality and on metrics that count on the other hand (Saleh, 2009).

On the micro levels, media and information lite-

racy could provide a road map of how to stimulate social progress, yet it remains in the domain of the rich and business or military elites. And on the macro levels, it remained as one of the key areas where the post-apartheid government has failed miserably to date. Until the value of education becomes ingrained in South African culture, the mentality of entitlement without effort will prevail until further notice.

So far, the South Africa rushed into implementing media and information literacy models without assessing and understanding their impacts at the recipient level that resulted from not considering the localization and domestication of their implementation. This unplanned incorporation of media and information literacy with the curricula is an outcome of the usual mobility restrictions, attitudes towards women, education and religious influences, especially at the community level where such social constraints are critical.

South Africa stands in a dire need for low-cost alternatives to conventional education (in terms of recurrent and non-recurrent budgetary inputs) that could be effective in quickly bringing in curricular reforms. This can be mostly based on print materials and interfacing or interactive (or contact) sessions, or the conventional means of curriculum development that might help domestication of the UNESCO model to fit the local challenges.

It is thus strongly recommended to set up alternative and innovative approaches to improve the media and information literacy culture through the orientation of citizens with affordable, appropriate and accessible options of technologies.

Practice-based research is also pertinent to attain the goal, by creating the knowledge, expertise and ethics involved as in the case of DC++ to implement deterring factors to help raise the bar of competencies of young learners.

The pilot study has projected a general trend of indecision about punishment for copyright infringement, though the majority of the sample linked the economic factor not just the direct digital skills needed to follow this educational model.

A number of policy recommendations are needed to attain the goal of mass engagement of media and information literacy in South Africa:

- 1) Policies should attempt to overcome current impediments facing coherence among national policies, by emphasizing its significance in the public agenda to provide the requirements, create the suitable environment and discuss the possibilities of domestication or localization.

- 2) Increase effective administration, transparency

and public participation through information sharing within each country, including freedom of expression and support for consumer awareness groups.

- 3) Goal-oriented policies toward educational and workforce openness and tolerance in order to stimulate greater labor force participation of women, improve educational and training opportunities for the majority of the disadvantaged black and colored communities in South Africa.

- 4) Stipulate educational access and infrastructures with a focus on digital literacy at the primary level and research creativities.

- 5) Build up strategies that are based on reading and using the database that can help include the marginal groups after defining and understanding their differences of race, color and gender related challenges in the South African society.

- 6) Identify connectors in local communities to find solutions based on understanding and appreciation of the differences.

But the challenge remains in how to create engagement and community-based leadership in giving high priority to educational improvement programs and providing the necessary resources, expertise, skills, motivations and access to succeed in accordance with the Millennium Development Goals (MDGs). Scarce public funds need to be complemented by maximum mobilization of private investment, through the establishment and sustainability of a welcoming environment for private initiative and risk-taking that could boost access by the poor to media and information literacy services and opportunities.

At the end, training around MIL therefore has got huge potential in enhancing the participation of the generations to come in South Africa and other developing societies in the information society. Media and information literacy remains hanging in the air between hopes of progress and dopes of harsh reality.

Notes

¹ The Digital Access Index (DAI) measures the overall ability of individuals in a country to access and use new ICTs. DAI is built on four fundamental vectors that impact a country's ability to access ICTs: infrastructure, affordability, knowledge and quality and actual usage of ICTs. It allows the cross examination of peers through a transparent and globally measurable way of tracking progress towards improving access to ICTs.

² The Human Development Index (HDI) is a comparative measure of life expectancy, literacy, education and standards of living for countries worldwide, by identifying the level of development and measuring the impact of economic policies on quality of life.

³ Free and open-source, peer-to-peer file-sharing client connects to the Direct Connect network the rapid proliferation of peer-to-peer networks has created a new channel for digital sharing.

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«The World Unplugged» and «24 Hours without Media»: Media Literacy to Develop Self-Awareness Regarding Media

«El mundo desconectado» y «24 horas sin medios»: alfabetización mediática para la conciencia crítica de los jóvenes

ABSTRACT

Across the globe, many students have easy and constant access to media, yet they often receive little or no instruction about the impact of their media consumption. This article outlines a «24 hours without media» exercise in accordance with the guidelines set in Module 7, Unit 1 of the UNESCO curriculum. In the fall of 2010, nearly 1,000 students from a dozen universities across five continents took part in «The World Unplugged» study. Researchers at the University of Maryland gathered students' narrative responses to the going without media assignment and analyzed them by using grounded theory and analytic abduction, assisted by IBM's ManyEyes computer analysis software. Results showed that going without media made students dramatically more cognizant of their own media habits—with many self-reporting an «addiction» to media—a finding further supported by a clear majority in every country admitting outright failure of their efforts to go unplugged. Students also reported that having constant access to digital technology is integral to their personal identities; it is essential to the way they construct and manage their work and social lives. «The World Unplugged» exercise enabled experiential learning; students gained increased self-awareness about the role of media in their lives and faculty came to better understand the Internet usage patterns of their students, enhancing their ability to help young people become more media literate.

RESUMEN

La mayoría de los jóvenes del mundo se conecta habitualmente a los medios de comunicación; sin embargo, en pocas ocasiones reciben formación respecto a los impactos que este consumo mediático tiene en ellos mismos. Este artículo expone la experiencia llevada a cabo en el marco del Currículum UNESCO, denominada «24 horas sin medios». En otoño de 2010, cerca de 1.000 estudiantes de 12 universidades de cuatro continentes participaron en el estudio «El mundo desconectado». Investigadores de la Universidad de Maryland (Estados Unidos) recogieron rigurosamente las reflexiones de los alumnos que participaron y las analizaron a través del programa estadístico IBM's ManyEyes. Los resultados muestran que los jóvenes, a raíz del ejercicio, fueron más conscientes de sus hábitos mediáticos, y muchos de ellos indagaron sobre su propia «adicción» a los medios, mientras que otros no consiguieron siquiera concluir estas 24 horas sin medios. También se pone en evidencia que el acceso cotidiano a la tecnología digital forma parte ya de su identidad juvenil y son básicas para entender su forma de trabajar y sus relaciones sociales. También se demuestra que los alumnos aumentaron su autoconciencia sobre el papel de los medios en sus vidas, y el profesorado comenzó a comprender mejor los intereses de sus alumnos, así como sus parámetros de consumo de Internet, mejorando sus habilidades para ayudar a los jóvenes a estar más alfabetizados mediáticamente.

KEYWORDS / PALABRAS CLAVE

Media literacy, media education, media awareness, Internet, media addiction, digital technology, mobile technology. Alfabetización mediática, conciencia mediática, Internet, adicción mediática, tecnología digital, tecnología móvil.

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1. Introduction

Increasingly, university students across the globe have constant access to media. They can read and share information, connect with friends and family, and be «plugged in» no matter their setting due to widespread Internet access and a plethora of mobile devices. Recent studies, focused primarily on secondary school students, illustrate the extent to which young people live in a media-saturated world. Students are increasingly reliant on mobile devices for their news and entertainment (Nielsen 2009) and are tethered to social media sites (Lenhart et al. 2010). Eight- to 18-year-olds consume more than 7.5 hours of media daily, with the majority of time spent viewing television content, listening to music, using the computer and playing video games (Kaiser Family Foundation, 2010).

As a consequence, media literacy scholars have suggested (Hobbs & Frost 2003) that media literacy curricula in K-12 environments include activities that invite students to reflect on and analyze their own media consumption habits. And indeed, Module 7, Unit 1 of the UNESCO Curriculum, «Internet Opportunities and Challenges», actively promotes the concept of media self-awareness in two of its learning objectives: «Understand young people's Internet usage patterns and interests» and «Develop their ability to use educational methods and basic tools to help young people use the Internet responsibly – and make them aware of the related opportunities, challenges and risks». Yet students often receive little or no instruction about the possible consequences of their media use (Thoman & Jolls, 2004; Puddephatt, 2006; Livingstone, 2004; Martens, 2010).

Students cannot learn how to fully participate in their societies as citizens and consumers, nor can they have a full appreciation for the roles of media in their lives, until they have taken a close look at their own media diet. Media literacy educators need to identify learning experiences in which students can reach their own conclusions about how to «fully participate as citizens and consumers in a media-saturated society» (Hobbs 2004: 44). As the Kaiser Family Foundation report notes, «Understanding the role of media in young people's lives is essential for those concerned about promoting the healthy development of children and adolescents». Current media literacy curricula teaches students to access, analyze, evaluate, communicate and create media (De Andrea, 2011; Rogow, 2004). But recent media literacy research, including «The World Unplugged» study outlined in this article, suggest that a sixth skill of self-awareness should be

added to this rubric. Before students can effectively analyze and evaluate media texts, they should be given the opportunity to become aware of how they access and use media.

In the fall of 2010, researchers at the University of Maryland, College Park, USA led a global study, titled «The World Unplugged,» to address this educational objective. «The World Unplugged» study was based on a «24 hours without media» project first assigned at the University of Maryland earlier that year, in spring semester 2010. Students in a core media literacy university course had been asked to go media-free for 24 hours and then blog about their experience: to report their successes, admit to any failures, and generally reflect on what they learned about their own consumption of media. The Maryland «24 hours without media» exercise offered university students an opportunity to track their own connectedness, and then analyze how they themselves could mitigate or prevent negative consequences of their media use.

More than 200 students took part in that spring 2010 assignment, and in the aggregate students wrote more than 110,000 words about their experiences. After institutional review board (IRB) approval, that rich data became a research study, and the online release of the results¹ attracted a great deal of media attention both in the United States and internationally.

Researchers from that study presented their results to the partner universities of the Salzburg Academy of Media & Global Change during its 2010 July-August session. A dozen universities expressed interest in participating in a comparable global research project. As a result, that fall nearly 1,000 students from 10 countries² took part in a 24-hour media-free exercise that formed the basis for the «The World Unplugged» research.

The international «The World Unplugged» version of the «24 hours without media» exercise provided students across five continents with an opportunity to become more self-aware about how much they depend on media in their daily lives and how much media both enhance as well as circumscribe their activities and relationships. As one UK-based student said after completing the exercise: «We feel the need to be plugged in to media all day long. Our lives basically revolve around it. It is the way we are informed about news, about gossip, the way we communicate with friends and plan our days».

2. Methods

A dozen universities in 10 countries (Argentina, Chile, China-mainland, China-Hong Kong, Lebanon,

Mexico, Slovakia, Uganda, the United Kingdom, and the United States of America) on five continents (Africa, Asia, Europe, North America and South America) participated in «The World Unplugged Project».

Students at all the universities completed «The World Unplugged» project in a 24-hour period between September and December 2010, dependent on each university's semester calendar and curricular needs. All 12 universities shared the same assignment template, a translation of it, or a close copy adapted for an individual country and/or university³. In advance of their participation, students were not told about previous students' experiences or the results of a prior study in order to avoid influencing their expectations and therefore the perception of their experiences during the exercise.

In the global study, as in the first U.S. – based one, participants at the various universities were asked to complete a SurveyMonkey online poll that included basic demographic data, including country of origin, racial identity, age, gender, religious identity, as well as questions about their ownership and use of particular media devices (e.g. Do you own a mobile phone or MP3 player? How many hours do you spend each day playing video games or on social-networking sites?).

Students' narrative responses were gathered by the universities and collected by researchers at the University of Maryland. Responses in Chinese from Chongqing University were translated in China by university translators; other non-English responses were translated at the University of Maryland by native language speakers, assisted by automatic translation software.

The total number of words in the collected student responses totaled nearly 500,000 – about as many words as Leo Tolstoy's «War and Peace»⁴. After the data collection (and translation when needed) of those responses across the 12 global universities, the analytic process followed a combined approach using grounded theory (Glaser & Strauss 1967) and analytic abduction as suggested by Peirce (1955). The process of analytical abduction can be best described as a continuous back and forth between empi-

rical data and preexisting theoretical constructs. Researchers first analyzed the data using grounded theory, which allowed nuanced understanding of participants' personal essays and could take into account cultural, social, economic and political distinctions among the participants from 4 continents, then analytic abduction followed.

Before starting the analysis, researchers were trained to ensure coder reliability. All responses were read at a minimum by two researchers. In the first reading of the responses, researchers isolated categories and keywords that emerged from student's responses. Each researcher individually identified these categories. There was significant convergence in the catego-

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ries and variations concerning the identification of keywords were reconciled (Strauss, Corbin & Lynch 1990). For instance three researchers used the responses to generate categories around a list of emotional words and devices, and then grouped them accordingly. Terms such as «dependence», «addiction», and «withdrawal» were gathered under a «Dependence» category, while words such as «peaceful», «relief», and «happy» were gathered under a «Benefits of Unplugging» category. The keywords were then plugged into IBM's ManyEyes software, which allowed researchers to highlight the different socio-cultural, technological and socio-behavioral classifications that were found within the responses. These categories were developed primarily on the emotional reactions to the experiment and reactions to the experiment based on the student's relationship to a particular type of medium (mobile phone or TV, for example).

Following the computer-assisted analysis of the

data, the responses were hand-coded by at least two researchers, and then reevaluated by a second team of researchers who then further organized, analyzed and wrote up the data by country, by medium and by emotional response. The findings of both the narrative responses and the quantitative surveys were released on a dedicated website.

With the participation of 1,000 people globally, the Unplugged study could not be a representative

the presence of media – both media's benefits and limitations. But perhaps what students became most aware of was their absolute inability to direct their lives without media. The depths of the «addiction» that students reported prompted some to confess that they had learned that they needed to curb their media habits. Most students doubted they would have much success, but they acknowledged that their reliance on media was to some degree self-imposed and actually

inhibited their ability to manage their lives as fully as they hoped – to make proactive rather than reactive choices about work and play.

There were multiple major findings across countries. Among the top results:

1) Students around the world repeatedly used the language of «addiction» and dependency to speak about their media habits. «Media is my drug; without it I was lost», said one student from the UK. «I am an addict. How could I survive 24 hours without it?». A student from Argentina observed: «Sometimes I felt 'dead'». A student from Slovakia simply noted: «I felt sad, lonely and depressed».

2) A clear majority in every country admitted outright failure of their efforts to go unplugged. The failure rate didn't appear to relate to the relative affluence of the country, or students' personal access to a range of devices and technologies. The research documented that students failed because of how essential and pervasive digital technologies had become in their lives. «It was a difficult day ... a horrible day», said a student from Chile. «After this, I can't live without media! I need my social webs, my cell phone, my Mac, my mp3 always!». Students also reported how desperately bored they were when they were unplugged. «I literally didn't know what to do with myself», said one student from the UK. «Going down to the kitchen to pointlessly look in the cupboards became a regular routine, as did getting a drink».

3) Students reported that media – especially their mobile phones – have literally become an extension of themselves, integral to their personal identities. Said a student from the UK: «Unplugging my ethernet cable feels like turning off a life support system». For many

Going without media during «The World Unplugged» study made students more cognizant of the presence of media – both media's benefits and limitations. But perhaps what students became most aware of was their absolute inability to direct their lives without media. The depths of the «addiction» that students reported prompted some to confess that they had learned that they needed to curb their media habits. Most students doubted they would have much success, but they acknowledged that their reliance on media was to some degree self-imposed.

sampling of students around the world; in the aggregate the data reflect only a snapshot of possible responses to going without media in the 12 universities and in the 10 countries that participated. It is worth noting as well that the sample size of participating students varied among universities, as did the size of the entire student populations of the participating universities from which participants were drawn. Still, despite vast differences among the participating schools and countries –geographic, political, religious and economic– researchers found striking consistencies in the responses of students. The ubiquity and dependence on social media and mobile devices, in particular, extended to every university from Uganda to Hong Kong, from the UK to Chile. In their media use students in this study appear to relate to each other in ways that transcend disparate national origins.

3. Results

Going without media during «The World Unplugged» study made students more cognizant of

students, going without media for 24 hours ripped back the curtain on their hidden loneliness. «When I couldn't communicate with my friends» by mobile phone, reported a student from China, «I felt so lonely as if I was in a small cage on an island». And the problems for some students went beyond loneliness. Some came to recognize that 'virtual' connections had been substituting for real ones – their relationship to media was one of the closest «friendships» they had. Wrote a student from Chile: «I felt lonely without multimedia. I arrived at the conclusion that media is a great companion».

4) Students reported that being tethered to digital technology 24/7 is not just a habit, it is essential to the way they construct and manage their friendships and social lives. The leading social media site across all five continents in the study was Facebook. Students reported that how they use social media shapes how others think of them and how they think about themselves. «There is no doubt that Facebook is really high profile in our daily life», said a student from Hong Kong. «Everybody uses it to contact other persons, also we use it to pay attention to others».

5) Many students said that although they knew they could be distracted at times, they hadn't been fully aware of how much time they committed to social networking and how poorly they actually were able to multitask. «I usually study and chat or listen to music at the same time so I won't be bored and feel asleep», wrote a student from Lebanon. «But what I mainly realized is that... when you really get off the media you realize... how many quality things you can do».

6) Students noted they use different communication tools to reach different types of people. Students can simultaneously be on multiple communication platforms, but in different ways: They call their mothers, they text and Skype Chat close friends, they Facebook with their social groups, they email their professors and employers. Students consider and sort through all these permutations automatically, but the implications are real for how they construct their personas and social networks.

7) Most students reported that they rarely search for «hard» news at mainstream news sites. Instead they inhale, almost unconsciously, the news that is served up on the sidebar of their email account, on friends' Facebook walls, and on Twitter. Because social media are increasingly the way students reported getting their news and information, very few students mentioned any traditional news outlets by name.

8) Many students noted some benefits to their media-free exercise: a sense of liberation or freedom,

a feeling of peace and contentment, better communication with close friends and family, and more time to do things they had been neglecting. Rarely, but in cases across the globe, students expressed a desire to set aside time to go media-free again in the future.

9) Some students commented on the positive qualitative differences in even close relationships during the period they went unplugged. «I interacted with my parents more than the usual», reported a student in Mexico. «I fully heard what they said to me without being distracted with my BlackBerry. I helped to cook and even to wash the dishes». A student from the U.S. wrote: «I've lived with the same people for three years now, they're my best friends, and I think that this is one of the best days we've spent with together. I was able to really see them, without any distractions, and we were able to revert to simple pleasures».

4. Discussion

The primary value of conducting a «24 hours without media» assignment is in the increased self-awareness students gain with regard to the role of media in their lives. Self-awareness is fundamental to empowerment – in order to understand how to make responsible use of the Internet, students must first become aware of their own usage patterns and behaviors. Thus, the assignment addresses the learning objectives of Unit 1 of Module 7 of the UNESCO curriculum by helping teachers understand the Internet usage patterns and interests of students, developing teachers' ability to help young people use the Internet responsibly, and prompting students to themselves become more aware of the opportunities, challenges and risks the Internet provides.

Module 7, «Internet Opportunities and Challenges», opens by stating that «Taking part in the information society is essential for citizens of all age groups». It is often assumed that young people –considered «digital natives» who grew up in a wired world– are fully aware of their own media habits, as well as the benefits and pitfalls of living in an information society. As Module 7 notes, this is not the case. Young people, while being able to benefit both from the resources available on the Internet and the ever-growing roster of web-enabled mobile devices, remain a vulnerable population. But rather than advocating a protectionist approach, UNESCO's Curriculum rightly suggests that «The best way to help them stay out of harm's way is to empower and educate them on how to avoid or manage risks related to Internet use» (UNESCO 128).

The «Unplugged» study has added a global perspective to the growing body of literature on the media

habits of college students, which includes research on the level of student involvement with electronic media as it relates to leisure activities (Kamalipour, Robinson & Nortman, 1998), an investigation into the relationship between frequency of Facebook use, participation in Facebook activities, and student engagement (Junco, R. 2011) and a case study of whether a social media site designed for students can help students make the transition from high school to college (DeAndrea & al., 2011). The «Unplugged» study provided a comprehensive picture of students' media use because it asked them to reflect on media broadly defined – from video games to cell phone use to Facebook visits.

The U.S. – based «24 hours without media» study began in early 2010 as an assignment to teach students to be more mindful about their media consumption patterns. However, the instructors quickly realized the didactic potential of the visceral experiences the conscious and self-administered media withdrawal provided. Instead of simply hearing a lecture about how media have influenced society, students experienced first-hand how media shape their daily behavior and access to information. Overnight the experiment enlightened the students about their media usage. Very few of the students had previously reflected about their media consumption patterns; after this exercise, they expressed a more conscious appreciation of how their media use enabled, determined and influenced their own behavior and socio-cultural location.

4. Impact on students and teaching

Educators around the world can reproduce the simple «one-day without media» exercise. As the two studies discussed in this article suggest, such an exercise heightens students' awareness of their own media habits and additionally leads to a more deliberate use and understanding of mediated information and media technologies.

Instructors face a choice when determining how best to educate students about the benefits and challenges of living in an age of infinite information. Lecturing students about the importance of being media literate, showing them statistics about how much time people their age spend on their computers, phones and other mobile devices, and exposing them to research about the effects of being constantly «plugged in» is one delivery method. But research suggests that a more effective way of educating and empowering students is to let them discover these lessons for themselves (Berkeley, 2009).

A compelling way to get students thinking about how reliant they are on media is to take everything

away from them and have them reflect on the consequences (Moeller, 2009; NAMLE, 2007; Singh & al., 2010). A day-without-media exercise enables experiential learning as described by Kolb and Fry (1975). The four-step experiential learning model derived from Lewin (1948), Dewey (1963) and Piaget (1973) argues that higher involvement leads to better learning. Kolb and Fry (1975) proposed that an experience is followed by observations of the experience. Such experiential observations help form abstract concepts, which in turn can be tested in new experiential situations. Similar to Kolb and Fry's model, the «24 hours without media» project begins with an experiential exercise. This is followed by a written reflection, which is used to reinforce key media literacy concepts that can be further strengthened in activities throughout a semester of work. In other words, the 24-hour exercise creates a basis upon which students can relate, reflect and analyze subjects and topics introduced in media literacy readings, lectures and discussions.

An additional value of the exercise is its open-endedness. The exercise as designed requires students to decide when over a preset time period they will go for a day without media. That requirement ensures that even before the media fast, students have to be reflective about the patterns of their media use in order to determine their personally optimum time for abstaining from media. In «The World Unplugged» study, some students prioritized the role of media in facilitating their social life, and so avoided conducting their media-free period over a weekend. Other students determined that they needed to use media in their coursework and outside jobs and so selected a weekend 24-hour period. No matter their choice, the fact of their being forced to make a conscious decision contributed to the students proactively evaluating media's roles in their lives. The «24 hours without media» exercise also creates a shared group experience that encourages animated class participation. The common experience fosters closer bonds among students, which also often inspires more active student engagement with the class and each other, an advantage especially for any later class group projects.

In an effort to enhance students' learning beyond the classroom, faculty implementing this exercise may find it useful to encourage student-run media to report on their peers participating in this project. News coverage of the exercise can reinforce for students who are participating that what they are doing has meaning outside their own classroom, and it can communicate to students who are not themselves going «unplugged» the powerful impact of media on daily lives and work.

5. Recommendations for teachers

The «24 hours without media» exercise enables teachers to gauge how their specific population of young people uses media. Such an exercise provides both teachers and students with current data (rather than statistics from some other group at some other time) that can be referenced throughout a semester or year-long course of study. The «24 hours without media» exercise allows students to critically examine their own specific media habits and see how their media-free experience compares to that of their immediate peers. Because this assignment requires self-examination and reflection rather than memorization or research, it is the experience of these researchers that the lessons learned remain with students.

The appeal of the «24 hours without media» exercise is in its simplicity. Teachers the world over are always looking for exercises that are easy to explain and implement, require few resources, take little time to complete and produce tangible results. Laying out the details of the media-free assignment is simple. All students need to know is that they are to refrain from using any form of media (from mobile phones to the Internet, from radio to television) for one full 24-hour period within a designated timeframe, and that they are to write about their experience immediately after finishing their media-free period. Teachers need not do any preparation for this assignment beyond articulating exactly what they want students to write about in their response essay – usually a mixture of logistics of the day, what technologies were missed most and what kind of emotions were felt during and after the exercise. Prior to the exercise, teachers should not explain to students why they are being given this assignment, nor should they provide students with any background (including past students' experience or news coverage) about the exercise, as student should come into this assignment with as few preconceptions as possible⁵.

Beyond the simplicity of the «unplugged» exercise, the exercise is also appealing because of its portability: it can be used in all media environments and in many classroom settings. The assignment meets students where they are: if they live in an immersive «broadband» environment, then students will likely need to forego for 24 hours a broad range of media, from mobile and digital technologies, to print and broadcast ones. If students are in a more limited media environment, they may only have to forego one or two media outlets – for example a mobile phone and the radio. In either case, students will emerge from the exercise more mindful of how, when and why they use media,

and what the impact of their use is on their intellectual, social, political and family life.

The «24 hours without media» exercise is appropriate for use in both secondary schools and at colleges seeking to promote critical thinking, media awareness and media literacy (The researchers have also consulted with middle schools that have adapted the exercise for younger students). The exercise can also be used across discipline and in all size classes. Journalism classes can use it as an introduction to the ways in which young people access information in the twenty-first century, the growth of user-generated content and the changing definition of the term «news».

Communication studies courses can use it as a starting point for a discussion about how audiences process information and increasingly expect to engage in two-way conversations with content producers. Political science courses can use it to discuss how changes in technology affect the state of political discourse and engagement. However and wherever it is used, «24 hours without media» fits well as an introductory assignment that gets students talking about their media use and the role and authority of media in their own environments. Teachers can use lessons learned from this exercise to broaden their class discussions however they see fit.

Researchers note that the «24 hours without media» assignment can be variously adapted to serve specific purposes. Teachers can assign students to spend more than 24 hours without media, to go media-free on a specific day, or to only forego certain types of media. The assignment can be adapted by asking students to go 24 hours without media and then immediately afterward asking students to track their regular media use for 24 hours. Students can also be asked to repeat the assignment over the course of a semester to create a more longitudinal study. Teachers can exercise freedom in establishing the parameters of the exercise, without considerably diminishing the impact of the project on students or limiting the rather sophisticated comprehension the teachers themselves gain about how their students find, share and experience media.

As a UK-based student who participated in «The World Unplugged» study said: «I'd actually recommend anyone take part in the challenge, as it heightens your awareness to how much we as people rely on media for so many things». Such student reactions to the «24 hours without media» exercise make a compelling case for such an assignment to become a core part of any media literacy course in secondary schools and universities around the world.

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Notes

- ¹ www.withoutmedia.wordpress.com. (12-01-2012).
- ² Universities participating in «The World Unplugged» (2010-11) study were as follows: Lead University: University of Maryland, College Park – School of Journalism (USA); American University of Beirut – Department of Social/Behavioral Sciences (Lebanon); Bournemouth University – Media School (United Kingdom); Chinese University of Hong Kong – School of Journalism and Communication (China/Hong Kong); Chongqing University – Literature and Journalism (China); Hofstra University – School of Communication (USA); Hong Kong Shue Yan University – Department of Journalism and Communication (China/Hong Kong); Makerere University – Department of Mass Communication (Uganda); Pontificia Universidad Católica – School of Journalism (Argentina); Pontificia Universidad Católica de Chile – School of Journalism (Chile); Universidad Iberoamericana – Department of Communications (Mexico); University of St. Cyril and Methodius – Marketing and Mass Media (Slovakia).
- ³ The template assignment gave to the dozen universities is available in the following link: www.withoutmedia.wordpress.com/about (12-01-2012).
- ⁴ That total number of words is approximate because many of the students who participated in the global study did not write about their experiences in English.
- ⁵ In recent semesters, professors at some of the participating international universities have assigned students following their own «unplugged» exercise to read press coverage about the results of the two studies discussed here. As the widespread news media interest indicates, the results of these two studies have received attention not only from academics engaged in media literacy research but from journalists and the digital technology community.

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Young People's Interaction with Media in Egypt, India, Finland, Argentina and Kenya

La interacción de los jóvenes con los medios en Egipto, India,
Finlandia, Argentina y Kenia

ABSTRACT

In contemporary information society, finding, evaluating and using information is a key survival skill. Conventional and new media such as libraries, archives, mass media and the Internet serve an important function in society as the sources of information. This chapter will focus on findings from research that was carried out in Egypt, India, Finland, Argentina and Kenya. Based on empirical research, it gives an overview of how young people today use a variety of sources for information seeking and describes the implications of these findings for media literacy programs. The chapter specifically explores young people's use of new digital and conventional media for information seeking and disseminating. Media diaries were collected from 175 children in Argentina, 100 in Egypt, 160 in India and 144 in Finland by the project researchers. With the help of the Nokia Research Centre we also managed to obtain 48 completed diaries from Kenya. All diaries were collected in the first half of 2010. Some light will also be shed on efforts led by international organizations, especially UNESCO, to foster teacher training in media and information literacy and create worldwide awareness of this competence.

RESUMEN

En la actual sociedad de la información, encontrar, valorar y utilizar la comunicación es una estrategia fundamental de supervivencia. Los medios tradicionales y nuevos como las bibliotecas, archivos, medios de masas o Internet tienen una función crucial para las sociedades como fuentes de información. Este trabajo presenta los resultados de un estudio llevado a cabo en Egipto, India, Finlandia, Argentina y Kenia. Basado en una investigación empírica, ofrece una visión general de cómo los jóvenes de hoy en día utilizan diversas fuentes para la búsqueda de información y cuáles son sus implicaciones para los programas de alfabetización mediática. En concreto se explora cómo los jóvenes utilizan los medios digitales (nuevos y convencionales) tanto para buscar información como para difundirla. Los investigadores del proyecto recogieron los diarios de medios de comunicación de 175 niños de Argentina, 100 de Egipto, 160 de la India y 144 de Finlandia. Con la ayuda del Nokia Research Centre también pudimos obtener 48 diarios completos de Kenia. Todos los diarios fueron recogidos durante el primer semestre de 2010. Los hallazgos giran en torno a los esfuerzos internacionales, especialmente de la UNESCO, de fomentar la formación docente en alfabetización mediática, creando una conciencia mundial sobre este tipo de alfabetización en los profesores.

KEYWORDS / PALABRAS CLAVE

Young people, diaries, information providers, media use, new media, media education, Internet, participation. Jóvenes, diarios, proveedores de información, uso de medios de comunicación, nuevos medios de comunicación, educación en medios, Internet, participación.

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1. Introduction

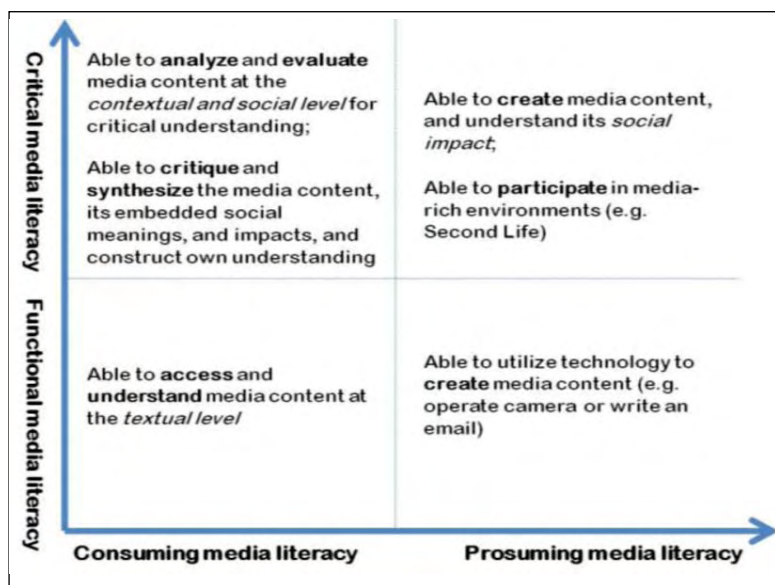
The term «information» seems deceptively innocuous, uncomplicated and neutral. Finding, evaluating and using information seems to be an everyday activity just like breathing, of which we are barely conscious. Information, however, is intricately linked with issues of power, hegemony and something as basic as survival in contemporary society. That is why information and communication have been a key focus in efforts as early as 1960s to establish a new world order, and it is only appropriate that information literacy is now considered an intrinsic component of media literacy programs.

Information seeking and processing is becoming increasingly complex with the multiplication of information sources and channels, the breaking-down of past gate-keeping institutions, global media flows and the shift from consuming information to prosuming information. Our information landscapes include conventional and new media sources like libraries, mass media, alternative media, folk media, archives, signs and billboards, commercial material and oral communications. Navigating these landscapes requires several different literacies. The new digital media, increasingly popular among young people all over the world, require an additional set of critical literacies because a vast amount of information on new media is user-generated. The rapid development of new media platforms has added new dimensions to media literacy programs.

New media literacy is a convergence of all literacy developed over the past centuries including classic literacy, audiovisual literacy, digital literacy and information literacy, with a humanistic perspective (Pérez -Tornero & Varis, 2010). Based on this notion of new literacy, Chen, Wu and Wang (2010) propose a framework that offers a systematic view of new media literacy. They propose that new media literacy be understood as two continuums from consuming to prosuming literacy and from functional to critical literacy.

Media educators all over the world have also realized that literacy practices –including media and information literacy– are culturally situated practices. A

UNESCO declaration in Prague (2003) urged the world's governments to develop interdisciplinary programs to promote information literacy as a necessary step towards creating a literate citizenry, an effective civil society and a competitive workforce. Caution must be exercised in responding to such a call. The past practice of imposing Eurocentric practices and curricula in all parts of the world has been heavily criticized. How information structures are organized in different geo-political locations; issues of access, availability and participation; and how active audiences negotiate their own meanings based on what they bring to a text (UNESCO curriculum) are important factors to consider in designing information literacy programs. Understanding of economic, cultural, political and ethical obstacles to information literacy is also vital. The role of empirical research in understanding young people's information needs, their information seeking behavior, and what different literacies they bring to this process is, therefore, crucial in designing successful and culturally relevant media education programs. At the same time empirical research would help us understand if youth practices vis a vis information behavior are distinctly different from the preceding generations. «Comparative Research in Youth Media participation» supported by the Academy of Finland is an example of empirical research that can



Chen, Wu, and Wang (2010).

contribute to meaningful media literacy programs. The project carried out between 2009-11 in Finland, Egypt, India and Argentina attempted to understand youth media participation practices in four different

contexts. This article, based on empirical research of media diaries in Egypt, India, Finland, Argentina and Kenya, gives an overview of how young people in different geographic and socio-cultural locations today engage with a variety of sources for information seeking and disseminating and what the implications of the findings are for media literacy programs.

2. Methodology

The idea to collect media diaries as a part of the Global Comparative Research on Youth Media Participation arose at an early international meeting of the project. The venue of the YMP project, the Research Centre for Contemporary Culture in the University of Jyväskylä, had already put together such a collection –«One Day of Media»– in Finland (Kytömäki, Nirkko & Suoninen, 2003). In it, over 1,500 people around the country wrote about their use of media on one particular day, November 29th 2001. In Finland, a collection of diaries about one winter's day had already been published in 2001 «Suomalaisen päivä» (The day of a Finn). The idea of collecting this kind of data about contemporary media use was hovering in the air, as it had also been done elsewhere, like in England by Davit Gauntlett and Annette Hill (TV-living; Television, Culture and Everyday Life, London 1999). The Finnish «One Day of Media» project was successful, and clearly brought up interesting further research questions and rich qualitative data, so it was taken as a model for our research project as well.

We were also able to collect media diaries for this exploratory research project from Argentina (N=175), Egypt (N=100), India (N=160) and Finland (N=144) through the project researchers. With the help of the Nokia Research Centre we also gathered in media diaries from Kenya (N=48). All of them were collected in the first half of 2010. We analyzed these texts for expressions of responsible citizenship (Kotilainen, Suoninen, Hirsjärvi & Kolomainen, 2011), remembering the inequalities of living conditions and disparities as a background of the analysis (Tufte &

Engel, 2009) and giving special emphasis to possible visible references to inclusive citizenship (Kabeer, 2005) and overall participation through media.

The children as media users in this study are not only seen as a «single cultural phenomenon» or as a group audience but also «as a multiple grouping and actors who are shaped by sociocultural differences» (Kotilainen, Suoninen, Hirsjärvi & Kolomainen, 2011), whose desires and practices –also in the use of media and the activities connected to it– are in constant movement and whose practices are developing. Furthermore, as Rossanna Reguillo points out (2009), political activities should be seen not only as local but as part of the global changes in children's media use. When talking about blogging Reguillo states that chil-

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dren's and young people's «subjective, personal, emotional everyday matters shape politics» and their actions through media should be respected as such. This means that access through media is vital, also as part of the learning process of civic citizenship.

The fluidity of the public and private spheres in children's lives means that there is a need to override the previous idea of the traditional division between the rational public and emotional private spheres (Dahlgren, 2006; Kotilainen & Rantala, 2009). The media diaries truly show how children have a mixed position and modes of participation in all media – but also the cultural competency that early access to media

and the networks with their peer activities offer in a world of the converging media (Jenkins, 2006; Jenkins & al., 2009).

The children were simply asked to write down all their media uses on one day (April 20th, 2011) from the moment they woke up until they went to sleep. They were also especially encouraged to mention not only the uses but also to write about the purposes of their media use, their thoughts and feelings connected to these uses and the content. Overall, the writings were short, as expected, a maximum of one and half pages of hand-written text. In some schools the given

state-run and private media. The Egyptian Radio and Television Union, which is a part of the Ministry of Information, supervises radio and television broadcasting. There are three national TV channels, six local channels and some private TV channels.

There are seven national radio networks. Three government-run publishing houses publish dozens of newspapers and magazines in Arabic, English, French and German. It is estimated that there are more than 600 newspapers and magazines in Egypt (Higher Press Council, 2009).

Egypt has a modern film industry which plays a role in the Arab world similar to that of Hollywood in the West. Egyptian films and TV programs are very popular in Arabic countries. It is estimated that the mobile phone subscribers represents 101% of the population. Some 65% of homes in Cairo and 40% of homes in rural areas have an Internet connection, and Web access is widely available at Internet cafes in the big cities.

Diaries were written by school children from preparatory schools (12-14 years old) in Cairo (urban area) and Fayoum (rural area). They were asked detail their media use for April 20th, 2011.

Analysis of the diaries suggests that there were some differences among young people with respect to their use of the media. Geographical location, age and gender emerged as important influencing factors.

Younger children were interested in being seen online, while the older ones were more interested in downloading material and films from the Internet. Also, the children from Cairo used Internet and mobile phones more often than those from Fayoum, the rural area in which the children used traditional media (radio, television and newspapers) more than those in Cairo.

It was also found that children use media mainly after returning home from school mostly between 8 and 10 pm.

Some quotes from the children's diaries: «I used the Internet to chat with my friends and to spend time with them. I also watched television for some time to see serials (a girl from Cairo).

- «I used the Internet to do some home-work for

Children use the new media regularly on a daily basis for specific purposes, such as chatting, searching for information and downloading material. Children have also become more active and interactive online. The new media have also led to the creation of some common habits of usage among young people regardless of their countries of origin. They even use certain words and items for SMS and Facebook that are known to them and, in most cases, unknown to older generations.

task varied from that intended, so some texts were extremely short, consisting only of a few words and a couple of lines. However, the results proved an excellent window for the variations in different cultures, highlighting the modes of media use, the meaning-making processes and even the differences in the modes of media participation.

In the following pages, the findings of this analysis in different countries will be discussed in relation to the given task, asking how these results should be read through the needs of the school curriculum and media education in general. The aim was to get a close picture of how media uses are embedded in everyday life –minute by minute– in the different cultures of children around the age of 14.

3. Egypt

Egypt is the largest country in the Arab world in terms of population with 85 million people, two thirds of whom are under 25. Egypt has a wide range of

nearly 2 hours from 8 to 10 pm. It was very useful as it enabled me to gather a lot of information for an assignment. The teacher was happy with it» (a girl from Cairo).

- «I used the Internet to read the news and to stay in touch with friends by chatting with them» (a girl from Cairo).

- «I watched a movie on television which was a comedian and then I used the Internet for 2 hours from 9 to 11 pm» (a girl from Cairo).

- «I use the Internet as a dictionary to find out the meanings of some words. I also used the mobile phone to call my father who works abroad (a girl from Cairo).

- «I used the Internet to find information about the globe and other countries around us» (a boy from Cairo).

- «I read newspapers to know about sports and football news. I also like reading magazines» (a boy from Cairo).

- «I follow educational programs on television. They are very useful. I also like watching religious programs on both television and radio. I learn a lot from these programs» (a 14-year-old boy from Cairo).

The above information suggests that the Internet is an important medium for all children in Cairo. They all used it on a daily basis in the evening. For children, the Internet was an important source of information, a medium for fun and entertainment and also a channel to meet and chat to their friends. Cairo children hardly mentioned that they use the other media such as television, radio or newspapers. In Fayoum, the children's use of the media was different.

Some quotes from their diaries:

- «I watch TV every evening as a kind of break while studying» (a boy from Fayoum).

- «I always watch television in the evening. I like watching serials and soap operas» (a girl).

- «I watch television everyday in the evening to know news about foreign people and foreign countries» (a boy).

- «I like watching sports programs specially football news. I also like watching programs on nature and animals. They are very interesting» (a boy).

- «I like watching films. Yesterday I saw a very good French comedy» (a boy).

- «I like listening to radio especially news programs and songs» (a girl).

Newspapers were also mentioned as important source for news especially human interest news. The Internet was also mentioned as being used for educational purposes, to seek information and do online searches for school homework. Entertainment and fun

were also among the reason for using the Internet.

- «I went online to chat with some friends. Sometimes I use the mobile phone to go online» (a boy).

A boy mentioned that he uses his mobile phone for games. The mobile does not appear to be a very common medium in rural areas.

Findings from the diaries have indicated that the geographical location was an important factor in deciding the young people's use of the media. It was also vital in deciding the purpose of their media use. Young people from the rural areas, who apparently come from low-income families, indicated that they used traditional media such as television, radio and newspapers more than those from the urban area (Cairo).

4. India

The diaries show that children give media a very important place in their lives and consider them of utmost importance for the country's progress and development.

- «My day starts with media and ends with media» says an urban girl from Cairo. «When we switch on the media, they just open up all the boundaries and limitations imposed on us», she continues. The importance of the media in world affairs is not lost on them. «The media run this world» (urban boy).

These young people see a strong link between media, public awareness, public opinion and progress of their country.

An urban girl explains, «public opinion depends to a large extent on the press... what is important is correct, neutral, unbiased reporting. Correct reporting depends on the freedom of the press».

Another student highlights the watchdog function of the media. «The government may not like the common people to know about its failures and unpopular measures. In such a situation everybody will have to keep his/her ears and eyes open to the government role and function. They will have to see that the freedom of the press is not curbed and that they get balanced and not distorted news».

One of the most striking observations from the diaries is that in talking about media every child associated media first and foremost with information. They did talk about entertainment and making connections through media, but both these functions were seen as secondary to information even when their own entertainment-related media use was high.

«Anything that gives or depicts information is called media» is the definition advanced by a rural girl. «Media bring us information about the whole world sitting at our home» says another rural girl. They show

interest in information on all the three levels – local, national and world. The diaries also show that children are interested in a wide range of subjects like politics and civic affairs, terrorism, wild life, health, history, science, cooking, cricket and movies. The children are aware of the vast variety of media that exist today and they also know about their potential.

«If I am watching TV there are channels like Discovery, History Channel, National Geographic, Living and Travel etc. and from these channels we get information about various things. For example, about old sculpture, monuments, nature and how we face problems during a natural disaster, the condition of economic development, how to survive if you are in a jungle, etc.» says an urban boy.

Even when many rural and poor children have no access to computers and Internet, despite their limited knowledge and negligible personal exposure, they are aware of digital media and are fascinated by them.

Young people clearly have their favorites among the different sources of information and their own reasons for making their choices. Newspapers and television emerge as the most popular sources of general information. Information sharing with parents and peers is very evident.

An urban student says, «I prefer to use print media, it is my addiction. A day does not pass that I don't pick up the newspaper. It helps me to compete in this big world. It also helps me to answer some general knowledge questions if I take part in debate».

«In a country like India where regional languages are equally important, magazines and newspapers in regional languages play a significant role in informing people about the events and happenings in India and the world,» stresses another student.

«Books are an ocean of knowledge; once we learn how to swim we can search and get knowledge about various mysterious unknown forces of nature. Even in my free time I prefer to watch the newspaper and I mean that I 'watch' the newspaper – its headlines and pictures, and I only read the topics which actually interest me, though I have to admit that the newspaper habit was forced on me by my parents, as advised by my teachers. I must agree that whenever I take part in quizzes or competitions, the information I gained through books and newspapers has helped me a lot and it increases my vocabulary too,» says an urban girl.

The counterargument to this view is «I would prefer television only because we can listen and watch news that we can't do through newspapers or radio». Some students also mention that the high level of illiteracy in India makes television a more suitable medium

for seeking information (an urban boy).

Internet is mentioned by urban as well as rural students, more frequently by urban students, but more in connection with computer use and school projects in rural areas while playing games and connecting with friends and family take precedence in the cities. Among digital media the mobile phone is the favorite and most widely used medium, even among rural children but again, it is not the preferred medium for seeking information.

Children show a strong emotional response to what they see and read. Issues that elicit the strongest emotional reaction are terrorism, Indo-Pak relations, India's progress and reputation, ill-treatment of women and girls, especially rape and social injustice. Typical emotional triggers are: «Whenever there is a depiction of stories on women on news». «When I watch and hear about cases of rape on television news». «When I watch the Indian team losing in a cricket match». When I read or watch news about any natural calamity where people have died». «When I watch news about terrorist attacks or social malpractices like female infanticide». A rural girl's anger is visible in her statement: «When media depicts news about the girl child being born and thrown away, it makes me very angry. At that time... I feel like destroying the TV set».

Children show acute awareness of the risks and harm associated with the media and problems with inaccurate or unbalanced information they might receive from them.

«But basically I don't like the Internet. Children play violent games and misuse it in many ways. Children sit for long hours in front of a screen and then it damages their eyesight, health and mental capabilities as well,» says an urban student. Both rural and urban students point out that sometimes exaggeration in the transmission of information creates panic and also spoils India's reputation in the world. An urban student cautions with an example: «There are methods for making bombs and if child has opened that website then what can be done?».

Despite their strong emotional engagement there is little evidence of production, information dissemination or creative participation in media, and this raises questions about structural, infrastructural and policy-level limitations.

5. Finland

The diaries of the Finnish schoolchildren emphasize the meaning of good access to all media due to factors such as the school system, libraries, the extent

of mobile phone usage, state support for literature and magazines and the media environment as a whole. Therefore, it is no wonder that the texts written by the young people repeatedly brought up interesting details such as the children's own disbelief at the amount of media they themselves use in a day. Media access was easy at home, in school and via the mobile phone, and there were very few if any restrictions on their use. So the children were using media almost all day long, with media use of more than 5 hours per day quite common:

- I have used the Internet daily between 10.00 and 23.00 with breaks of a couple of minutes or hours. The pages I have used are, for example: DevianArt.com, One-manga.com, mangaFox.com, Sangatsu manga, Aniki forum, Kupoli, Wikipedia, Google (a girl).

As media are a natural part of their daily lives it has become routine, which the children were aware of when charting their actual use of media.

Also apparent was the social nature of particular media: children were connected to friends and relatives through irc-gallery, Facebook, Youtube and Messenger, and so on, often simultaneously:

- Messenger is an important media for me, because I live far away from my friends so we can chat and I can hear what's going on. Then I call and send text messages to my friend and we put pictures from his computer onto my flash drive. We went to my friend's place with another friend of mine and watched the news (a girl).

The simultaneous and multiple uses of media were common: using mobile both for contacting others and listening to music, and using social media and following the news at the same time was typical:

- It is fun to do everything with the computer and I use it for programming games, editing pictures, communication (picture gallery and Messenger), having fun (games), listening music, using Internet and watching movies (a boy).

- No new comments on picture gallery, nothing new in Facebook. I clicked on the web pages of the afternoon newspaper. The news did not interest me much, about the volcano eruption that had already been talked about since last Thursday. So I ended up

reading entertainment news; yet another person had been for cosmetic surgery and there was a big story about it across several pages. Zip, away that page goes. From my bed I grabbed my phone – it was obviously Nokia. No news, nobody had called, either. After a shower I checked quickly if there was anyone on Messenger and for any emails in my Hotmail inbox (a girl).

The global aspect of media came up in several ways. New media in particular helps to cross borders, and the influences of the other cultures were obviously easier to absorb. Furthermore language barriers (especially in English) were lowered:

They need to be online, to communicate with their peers, to consult information, to have fun, all these activities are integrated into their lives as a whole. But the question remains in our paper about whether these young people have linked use of media to media education. No one has told them of the importance of being creative or critical in their use of media, a finding that urges us to prioritize the integration of media education in all educational programs.

- I read books at school and sent some messages to my friends. After school I read the local newspaper, mainly because me and my friend had been interviewed in the football supplement. I turned on the computer and went to picture gallery, then went to Messenger and Skype. I talked for a moment with my sister through Skype, she is an exchange student in South Korea (a girl).

- The biggest news was about the volcano in Iceland and the ash cloud that is spreading and its consequences. In connection to that I joined the «Send the Foreign Ash Clouds Back Abroad» [an anti-racist humor group] on Facebook (unknown).

- I used media today when I watched Russian news – I have lot of friends abroad so I sometimes use the computer to talk to them on Messenger where I can use webcam (a boy).

One of the consequences of the global perspective is the awareness of world issues – a theme that came up among children from all countries. In Fin-

land, media use for social needs clearly outweigh the political ones, but there were plenty of comments on contemporary issues:

- Later on in the evening I watched TV for a moment, and just before writing this diary I read a book about boys in Afghanistan. It made me think. I realized that what is common for me is unfamiliar to millions of others. I feel privileged (unknown, Finland, 139).

6. Argentina

The strong expressions were also noted in the responses from children in Argentina – but in a different way. It may even be said that the overall impression of the responses was that they were rather emotional. In

At the present time, a wide range of initiatives are being carried out worldwide to promote media and information literacy, in particular UNESCO's teacher training curriculum. It was created by a group of experts with the help and support of UNESCO and is an initiative that should be supported worldwide.

the diaries media was even seen as a good friend filling an emptiness, preventing loneliness or boredom, or giving life to the moments when real friends are not available:

- Most of the media I used were fun and made me feel good; I spent several great moments with them, except for the newspapers that made me sad (girl, Argentina).

- When I use the media to communicate with friends I never feel alone. I always feel the company of my friends. I feel happy. I used the media alone. And I talk with my friends about what is in the media if something really important happens. Media are very important for me because it is what I do most of the day (a girl).

- When I came back from school, I used the phone a lot because it was good company while I was alone at home. I sent text messages, I turned on Messenger to chat, and I entered Facebook and Twitter. I also used the Internet to check my emails

and to look at Amazon and the best buys (a boy).

For the children living in an urban area the mobile phone is understandably a tool for the social relations, not only with friends but also family and relatives:

- I also use the regular telephone, to call my grandparents because they had been to the doctor and I wanted to know how they were. I also called a friend in another city – I do it once a week. It is a need I have because she is a lot of fun and we have two very different lives (a boy).

- I used my cell phone with my mother because I can talk to my mum for free and I texted a friend because there was something I needed to tell her. Then I used the regular phone to call a friend and tell her about the meeting we had in the student union. I

used the computer because I use it every day to chat and to enter Facebook (a girl).

- Before falling asleep, I turned on the TV to see a film and I sent messages to my brother who is living in another province. I felt much better when I communicated with him, because I missed him a lot. The media I most use is the cell phone (a girl).

Among Argentine children the mobile was a central tool for media use. Compared to the Finnish media diaries where multiple uses of media

were common, children in rural areas in particular made multiple use of a single medium, the mobile phone.

7. Kenya

As in other countries, the children acknowledged the importance of media as a worldwide phenomenon. The main role of the media was seen as educating and informative. The news is read carefully and commented on thoughtfully in the diaries. Radio is clearly the most important media device for children along with newspapers, but the mobile phone was also mentioned as a tool for following the news. This need to keep up with the news comes up constantly; not just the need to know what is happening in their area but also globally.

- Before starting the daily work I have to know what is happening in our country and around the world... So I turn on the radio...I was happy with Citizen FM and their good work. You are really hel-

ping the youth to know what to do at the right time (a girl).

- I like listening to the radio because it enables me to know more about our country (a girl).

- Listening [to the radio] helps – It encourages people to know what is happening worldwide (a boy).

The children express how they learn and critique politics and culture through the media, and describe the multiple uses of the media, and their role in society.

- The most interesting is Afro-Cinema. I like it because I have to know what is happening in other countries e.g. Nigeria (a girl).

- The Kiss FM teaches us how to take care of ourselves. It makes us relax. Kiss FM educated the learner. This channel gives jobs to the jobless (a girl).

- In my leisure time, I like to read the newspapers about chapter six of the harmonized draft constitution of Kenya, in which part three speaks about human rights and the gender commission (a girl).

- When I was on the way...I was with a crowd of people with the same newspaper and they were advertising it. I was interested in it and I borrowed one to have a look. I was looking ahead. I got somewhere and I saw a lot of children reading a poem. That poem was very interesting and it was about «Education is the key of life» (a girl).

As the previous quotes show, the use of media is a natural part of everyday life, and the sense of communality is strong in the use of the media. The strong women's movement in Africa was frequently acknowledged by the children, and issues related to women's rights were followed carefully.

- I heard [from a radio] shocking news about the brave girl...The same day and date and time I heard about the woman who got burnt (a girl).

Overall in Kenya as in India, reflecting on the social questions related to the media was a significant part of the media diaries. They speak of shared social discourse how social issues affect everyday practices at school and at home.

8. Conclusion

An analysis may conclude that the new media, Internet and the mobile phone, were the main information providers for young people, as was common in all countries. At the same time, there were some differences among countries. India and Egypt, for instance, were similar to some extent, with respect to the use children made of the traditional media in rural areas. There were some similarities among people who live in rural areas in all countries in terms of the media used, and not merely the new media, while in

Argentina the mobile phone was the vital medium in town and country.

Children use the new media regularly on a daily basis for specific purposes, such as chatting, searching for information and downloading material. Children have also become more active and interactive online.

The new media have also led to the creation of some common habits of usage among young people regardless of their countries of origin. They even use certain words and items for SMS and Facebook that are known to them and, in most cases, unknown to older generations.

Though the new media have brought many benefits, previous research suggests that the Internet and the mobile phone may harm children (Sonia Livingstone & al., 2006: 54-55), which urgently requires media literacy education to be implemented especially in countries with a lower level of media literacy education such as Egypt and India.

Children nowadays are heavy users of new media. They are also more participatory and interactive than before. As suggested by Kotilainen (2010: 81-82) children's citizenship can be strengthened by civic media education.

Research findings show us that there is a clear divide in media use between young people from urban and rural areas. Both of these young collectives consider the media to be attractive but not all can access them. The young living in rural areas are limited to traditional media, although the mobile phone is used to access Internet and other services. This means, that the mobile phone could help to close this gap between the urban and rural young.

Children and young people, especially in Kenya, have a need to know what's happening in their country, but also in the world, a finding that shows the interest of young people in current events.

The emotions linked to media use and consumption is also a fact to keep in mind: they need to be online, to communicate with their peers, to consult information, to have fun, all these activities are integrated into their lives as a whole.

But the question remains in our paper about whether these young people have linked use of media to media education. No one has told them of the importance of being creative or critical in their use of media, a finding that urges us to prioritize the integration of media education in all educational programs. These young people are using all these new media, they are consulting all this information but they have no educational spaces where they can reflect on their own use of media, and for this reason, they need media literacy

more than ever. This media literacy should take into account different contributions from around the world; critical perspective (Kellner, 2007), consider varied contexts (Gutiérrez & Tyner, 2012) and the international efforts to develop media education (Aguaded, 2011).

At the present time, a wide range of initiatives are being carried out worldwide to promote media and information literacy, in particular UNESCO's teacher training curriculum. It was created by a group of experts with the help and support of UNESCO and is an initiative that should be supported worldwide, following its presentation in Fez (Morocco) in May 2011. This curriculum should be taken as mentoring for teachers being trained in different countries. We also need the collaboration of policy makers as well as ministries of education in different countries in order to foster the process of teacher training.

Other international organizations such as the Academy of Finland and Mentor Association are also involved in this kind of activity. The Mentor Association is promoting highly ambitious programs for teacher training in the Arab world and Latin America, and supports initiatives to raise awareness of the value and importance of media and information literacy.

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Challenges and Risks of Internet Use by Children. How to Empower Minors?

Retos y riesgos del uso de Internet por parte de los menores. ¿Cómo empoderarlos?

ABSTRACT

The aim of this paper is to reflect critically, using the latest data taken from reports, research, publications and other sources, on how to empower children in their daily Internet browsing given current online risks. These risks faced by children are a real concern for teachers, families and researchers and this article will focus on analyzing those online risks which produce the most emotional distress for children, namely grooming and cyberbullying. The use of the Internet, and the ease with which information or situations can be seen on it, has broken the social taboos associated with the risks that children are exposed to. Data such as 44% of children in Spain having felt sexually harassed on the Internet at any time in 2002, or 20% of U.S. children suffering cyberbullying according to a survey of 4,400 students in 2010, indicates the severity of the problem. Therefore, as stated in UNESCO's MIL Curriculum for Teachers (Media and Information Literacy), it is necessary to work on the responsible use of the Internet by children and to empower them to reduce the possibility of them becoming future victims or bullies. At the end of the article we will develop a list of recommendations to be considered in the design of educational activities focused on the critical training of the minor's use of the Internet.

RESUMEN

El objetivo de este artículo es reflexionar críticamente, a partir de una selección de últimos informes, investigaciones, publicaciones y otras fuentes, sobre las orientaciones de cómo «empoderar» a los y las menores frente a los riesgos on-line actuales. Entre los diferentes riesgos quisiéramos destacar los que más violencia emocional producen; las situaciones de «grooming» o ciberacoso, cada vez más visibles y urgentes de prevenir conjuntamente. El uso de Internet y la facilidad de visibilizar cualquier información o situación ha permitido romper el tabú social respecto a estos riesgos. Datos como el que el 44% de menores en España se había sentido acosado sexualmente en Internet en alguna ocasión en el 2002, o el que el 20% de niños en Estados Unidos sufría ciberacoso, según una encuesta realizada a 4.400 estudiantes en el 2010, nos indican la gravedad de la problemática. Por ello, tal y como se recoge en el Currículum MIL de la UNESCO para profesores (Media and Information Literacy), es necesario trabajar el uso responsable de Internet por parte de los y las menores, para empoderarlos evitando que puedan convertirse en futuras víctimas o acosadores. A partir de los riesgos reales que pueden padecer, así como las respuestas científicas y sociales que se han dado al respecto, elaboraremos una serie de recomendaciones a tener en cuenta en el diseño de actividades educativas enfocadas a la capacitación crítica de los y las menores en cuanto su uso de Internet.

KEYWORDS / PALABRAS CLAVE

Children, Internet, cyberbullying, grooming, critical thinking, media literacy, information literacy, empowerment. Menores, Internet, ciberacoso, grooming, alfabetización informacional, pensamiento crítico, alfabetización mediática, empoderamiento.

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1. Introduction

UNESCO's MIL Curriculum for Teachers gives special importance to reflecting on the opportunities, risks and challenges the Internet presents, and currently offers, with respect to minors. With this in mind, the document places particular emphasis on the importance, both for children themselves and for teachers, of understanding and reflecting on the concepts and characteristics that define the Internet and especially Web 2.0 applications and everything associated with it. Similarly, the curriculum emphasizes the importance of educational processes as key elements in the apprehension and assimilation by minors of the risks and opportunities offered by cyberspace; hence, special emphasis on the need (perhaps, urgency) for teachers to gain as much knowledge as possible on the wide and varied terminology and trends of minors, as well as their user habits, while on the Internet. Teachers also need education in the area of legislation and rights. They need to find out about the main agreements, declarations, white papers and other documents of national and international importance on the subject. According to Wilson, Grizzle, Tuazon, Akyempong and Cheung (2011: 128), «Children and young people are often well acquainted with its applications and can benefit from its use tremendously, but they are also vulnerable. Risks and threats accompany this positive development, often in parallel to those that already exist in the offline world. [...] The best way to help them stay out of harm's way is to empower and educate them on how to avoid or manage risks related to Internet use».

These objectives are set out in detail in two work units (Unit 1: Young people in the virtual world, Unit 2: Challenges and Risks in the virtual world) which propose an exhaustive work of conceptual reflection on Web 2.0, the main usage habits of minors on the Internet, children's rights and other international documents related to issues involving cyberspace, among other topics. The learning objectives, according to the curriculum developed by UNESCO, focus on guaranteeing that the teacher is able to understand general patterns of behavior as well as the interests of children when they browse online. Furthermore, it attaches particular importance to the teacher's ability to develop independently educational methods and tools to generate basic resources for children encouraging the responsible use of the Internet as well as raise awareness of the opportunities, challenges and risks posed by the on-line scenario.

With respect to the objectives of these two units of the curriculum, and to the proposals set out in this

research paper, we must emphasize that the data portrays a scenario replete with interrogatives. At the same time, it demands the design, systemization and creation of mechanisms (methods, materials, discussion areas) that contribute to improving the use that minors make of the Internet, the role of teachers in the awareness and learning process and the overall opportunities that cyberspace offers.

In the Spanish context, according to figures from the National Institute of Statistics (Spain), 70% of minors between the ages of 0 and 14 use a computer and have access to the Internet at home, 52% of which invest a minimum of five hours a week surfing the Internet¹. More recent studies by Bringué, Sábada and Tolsa (2011) establish that 97% of the homes where children between the ages of 10-18 own a computer, 82% are connected to the Internet. To that information must be added that prior to turning ten, 71% of children claim to have had «experiences» in cyberspace. The same report establishes that most minors spend more than an hour a day on the Internet while 38% claim that during the weekend the time they spend on the Internet exceeds two hours a day.

The place where minors spend time on the Internet is equally important insofar as the «where» and «with whom» is established as these factors condition the on-line content consulted. In this respect, the same study indicates that 89% of Spanish adolescents surf the web at home. And of these, one in every three teenagers has the computer in their bedroom, which is a crucially important factor as it limits the supervision that adults (parents, tutors and guardians) may exercise over their children. 21% have the computer in the living room. According to the data in the report, only 15% of homes with children aged between 10 and 18 have a laptop. The report adds that 29.4% consult the Internet at a friend's house; 28.5% at school; 24.4% at a family member's house and 10.2% at a cybercafé. Finally, it is interesting to note that 86.5% of Spanish adolescents that use the Internet are alone in front of the computer. Shared use of a computer with friends is 42.9%; with siblings 26.2%; with mothers 17.7% and with fathers 15.8%. The results of the report establish that close to 45% of minors recognize that their parents ask them about their activity while on the Internet. For their part, more than half of students between the ages of 10 and 18 use a computer and the Internet as a support for their schoolwork. The presence in social networks is especially interesting due to their reach and rapid growth. In the Spanish context, according to the findings of Bringué, Sábada and Tolsa (2011), 70% of users between the ages of 10

and 18 are present in a social network, being Tuenti (three out of five consider it their favorite) and Facebook (one in every five has an account) the more popular choices. The study also introduces relative data with respect to the sensitivity of minors in terms of the risks associated with the Internet. It seems relevant that one in every five users between the ages of 10 and 18 believes that they can upload any video image on the Internet. To this information can be added equally disturbing data that shows that 10% of minors surveyed have admitted to using the Internet to do harm to a peer.

According to the study carried out by Bringué and Sábada (2008) during which 25,000 children between the ages of 6 and 18 were surveyed from Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela, 46% of the children affirmed that their parents only asked them what they did while surfing the Internet. On the other hand, 36% indicated that their parents «do nothing» while 27% replied that their parents make it a point to «take a look» at them while they surf the Web on a regular basis. The study establishes that only 9% of those children surveyed replied that their parents «do something together» with them while 5% said that their parents look at their emails or check the sites the children have visited. Furthermore, within the Latin-American context, the study reveals that 45% of minors interviewed between the ages of 6 and 9 prefer the Internet over television and that, among the most valued activities, are sending emails, virtual «meetings» and conversations in real time. The possibility of «having fun alone or with others» at a distance is also highly valued by the children surveyed. In the North American context, a study on the use of the Internet by adolescents establishes that leisure (movies, TV series, music etc.), the search of information and receiving instant messages constitute the most popular activities on the Web. The following table, taken from the «Pew Questionnaire on the Internet and American life for parents and teens, 2006»², allows us to verify this type of activity in cyberspace.

The above table shows the growing tendency of

minors to dedicate their leisure time to surfing the Internet. It thus establishes an increase in the time dedicated to cyberspace in detriment to other leisure activities which previously had been analogue in nature. Therefore, by virtue of the percentages indicated in the table above, it is possible to identify different work areas within the context of the use of the Internet by younger audiences.

In all cases, the figure and role of the teacher is crucial in order for minors to attain a critical, analytical and qualitative use of the Internet. This set of goals interconnects with the main objectives established in the curriculum of UNESCO with respect to minors and the use of the Internet. Finally, taking into consideration these aims or trains of thought, we can list the following points to consider:

- Conceptual reflection. There is a need to identify and establish the scope of the main concepts introduced by the Internet, as well as their implications,

Activity	Percentage
Visiting websites for downloading movies, TV series and music	81%
Obtaining information on news and current affairs	77%
Sending or receiving instant messages	68%
Watching open video platforms like Youtube	57%
Using social network sites like Myspace or Facebook	55%
Accessing information on universities or subjects of interest	55%
On-line games	49%
On-line shopping (clothing, music, books)	38%
Accessing information on issues related to health, diet, physical fitness	28%
Downloading podcasts	19%
Visiting chat rooms	18%

Table 1: Adolescent activities on the Internet (2006).

connections and defining characteristics. This is ultimately a necessary challenge in order to have teachers capable of dealing with the Web 2.0 scenario, and the Internet in general, in a solvent and autonomous way. Similarly, teachers must know the content of the main agreements, treaties, declarations and other documents, international or national, and have contributed to the legislation and / or regulation of questions concerning the presence of children in cyberspace and the potential uses they make of it. Teachers must be able to grasp the possibilities of the Internet in their daily work, applying it in the early stages of investigation, preparation of teaching materials, creation of e-activities etc.

- Establishing mechanisms of mediation in the consulting process. The characteristics of the Internet, tied to the uses that children make of it, call for the creation and application of mechanisms that guarantee, through mediation, the use that children make of the

Internet. This raises the need to reflect on the most appropriate ways in order to achieve complete digital media literacy among these users.

- Track design for autonomous learning. The changing nature of the Internet calls for the design of strategies and spaces (especially virtual) that reinforces the autonomous training of teachers in the aspects associated with the Internet and childhood.

- Application of transversal and ongoing issues. The conceiving and design of the curriculum should include a transversal focus that strengthens the presence of elements directed at all times at stimulating critical reflection on the relation between the Internet and children. This continuity will mean that the treatment of internet content with respect to children will not be relegated to a meaningless section of this study.

2. Method and Materials

Keeping in mind everything said thus far, this paper strives to carry out a systematic study and analysis of the most relevant documentation on children and the Internet. We proceed to compile and offer a selection of approaches and proposals that researchers, experts and theorists, especially in the Spanish and international contexts, have presented on this topic, to contrast their views with the focus and proposals included in the curriculum of UNESCO.

The results presented below are the fruits of a literature analysis undertaken on international scientific publications of impact, as well as reports on research related to the topic and on expert social organizations. The choice of material is based mainly on contributions related to the risks of «grooming» and «cyberbullying» and on recommendations on how to empower children and lower the risks they face on the Internet. These results are contrasted with the orientation provided in the MIL Curriculum in order to draw pertinent conclusions and prepare future lines of work in this field.

3. Results

Among the eight risks identified in the MIL Curriculum of UNESCO, two that we consider to be of the greatest social concern present today have been selected, namely grooming and cyberbullying. Both risks, indeed threats, generate a negative impact on the emotional development of children.

Two of the three major themes to work on in the Unit of «Challenges and Risks in the virtual world» are 1) the work of understanding the challenges and risks of Internet use by children and 2) their empowerment through the responsible use of the Internet. It is there-

fore necessary to train teachers in how to empower children to face these challenges and risks.

The aim of the literature analysis is to offer appropriate recommendations to teachers to facilitate their educational tasks in this subject. The following results are reported: the definition of cyberbullying and 'grooming', data on its prevalence in Spain, Europe and the United States and, finally, a selection of scientific and social recommendations are made with respect to the empowerment of children due to the challenges and risks that daily on-line contact brings.

3.1. Understanding current risks and challenges:

Prevalence of grooming and cyberbullying

Bullying is defined by harassment between peers. When it is measured by on-line interaction it is known as cyberbullying. According to one of the latest publications (Law, Shapka, Hymel, Olson & Waterhouse, 2012), both offline and on-line harassment are similar, although differences do exist between the process and the consequences. The authors state that in offline harassment situations the roles are more marked: one party perpetrates the aggression while the other suffers its consequences. Some go to the defense of the victim while others support the one who harasses. On the other hand, as Law's research (2012) indicates, these roles are not as defined in on-line interactions. The possibility of reacting to harassing messages received via Facebook, or other social websites, by posting similar negative comments on the profile of the harasser, allows cyberbullying to become interpersonal violence turning it into reciprocal cyber-aggression.

In recent research from the US, from a sample consisting of 4,400 students aged between 11 and 18, 20% acknowledged having been the victim of cyberbullying while 10% admitted to having been both bully and bullied (Hinduja & Patchin, 2010).

In Spain, according to selected data (Garmendia, Garitaonandia, Martínez & Casado, 2011), 16% of minors between the ages of 9 and 16, claimed to have suffered from bullying both offline and on-line. One of the disturbing facts is the ignorance of parents; 67% of guardians of children who had received nasty or hurtful messages claimed that their children had not received such messages, thereby ignoring the reality experienced by their sons and daughters. In Europe, 19% of children aged between 9 and 16 said they had received such comments in the previous 12 months (Lobe, Livingstone, Ólafsson, & Vodeb, 2011).

This risk, harassment between peers in the way of on-line interactions, can have a very negative impact on the emotional development of children; depression,

low self-esteem, and in extreme cases suicide, as evidenced by the Jokin case in 2003 or, more recently, the case of Phoebe Prince in 2010.

Most worrying in recent years is detecting, in accordance with the chosen data, the increase in the number of cases of cyberbullying. This in turn leads us to consider the urgent need to train teachers and educators on this subject. Thomas Ryan (2011) claims that teachers who are participating in his research calling for the inclusion of cyberbullying as a subject in higher education. It also appears that the majority of participating teachers identifies these situations and tries to find solutions in some cases, but recognize that they do not know how to manage it properly.

The second group of risks chosen is grooming. This concept refers to the interactions carried out prior to sexual abuse on the part of the predator to gain the trust of the minor and obtain a date for a sexual encounter which generally ends in abuse (Kierkegaard, 2008; McAlinden, 2006). The grooming is prevalent both off and on-line. One of the myths to overcome is that on-line grooming is only perpetrated by strangers while, in fact, in most cases, it is perpetrated by people known to the victims, as in the case of sexual abuse (Bolen, 2003).

In recent years, the increase in these interactions in cyberspace has led the European Parliament to debate the importance of including on-line grooming as a crime against children. Thus, in the recent European Directive (2011), on-line grooming was added as a criminal offense, among other punitive measures, to protect minors from sexual abuse, while promoting increased investment in prevention programs as well.

In the United States, according to data published in 2006, the percentage of soliciting sex on-line (including grooming) dropped from 19% in the year 2000 to 13% in 2005. However, aggressively soliciting sex on-line from minors rose from 4% in 2000 to 7% in 2005 (Finkelhor, Wolak & Mitchell, 2006). In Europe 15% of children between the ages of 11 and 16 say they have seen or received sexual messages online in the last 12 months (Livingstone, Haddon, Görzig & Ólafsson, 2011).

In Spain there are two reports that show a sub-

stantial difference in the percentage of children who have felt sexually harassed on the Web. On the one hand, according to one report, 9% of Spanish children between 11 and 16 said they had received sexual messages (Garmendia & al., 2011). On the other hand, in the other report, it noted that 44% of Spanish children had felt sexually harassed on the Internet at any given time, within which 11% admitted to having been victim on several occasions (ACPI / PROTEGELES, 2002). This disparity of percentages indicates the need to design specific research on this type of risk to better the understanding of its prevalence in Spain. The publication of data on cyberbullying and online grooming clearly demonstrates how both risks are pre-

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sent in the lives of children. What unites all researchers is the need to understand this reality on a deeper level and the best way to address it. According to the authors, we must avoid alarmist speeches and promote positive Internet use among minors. The authors coincide in valuing the use of the media for the benefits it brings to children in terms of their learning and development. But they point out the importance of promoting discerning attitudes and prevention when dealing with the media, not only limited to children but also among the community as a whole, with particular reference to educators and families (Anastasiades & Vitalaki, 2011; Livingstone & Helsper, 2010; Oliver, Soler & Flecha, 2009; Pérez-Tornero & Varis, 2010; UNICEF Innocenti Research Centre, 2011; Wolak, Finkelhor, Mitchell, & Ybarra, 2008).

3.2. Recommendations for empowering children in their responsible use of the Internet

Empowering children against the risks associated with the Internet should be included as one of the

basic features of any educational curriculum. This inclusion can be treated as specific content, as is the case in the MIL Curriculum, but also as (an educational overlap) (interdisciplinary), ever-present on a day to day basis in any school and in all subjects taught. Due to the increased use of ICTs by children, the educational community cannot only limit itself to defining the empowerment of children to a few scheduled sessions. On the contrary, global educational strategies must be devised to strengthen competencies related to media and information literacy (Perez-Tornero & Varis, 2010).

Educators, on the other hand, as previously shown, demand orientation in order to address this problem. For this very reason the following recommendations are defined as basic by both authors and social organizations:

- Focusing prevention content on interaction and not just on the publication of data, messages or images. Often, content designed to prevent violent situations such as cyberbullying or grooming concentrates on alerting of the danger which, it is assumed, is conveyed exclusively by data or images on the Internet without exploring the 'why' of such information. Researchers warn that using language of prohibition and more so with minors and adolescents, is counterproductive. Therefore, the most important factor is to focus on content of prevention within on-line interactions that minors may be exposed to (Valls, Puigvert & Duque, 2008; Wolak & al., 2008).

- Designing community-based prevention models that include the entire community, especially family members. As previously shown, both teachers and families need training in these risks, but also to participate together in the designing of the community models in the prevention of violence (Oliver & al., 2009). Only by jointly coordinating efforts will goals be achieved more effectively. Minors also express their voice with respect to on-line risks at conferences such as the one organized by the CEOP, IYAC (International Youth Advisory Congress), held on July 17, 2008 in London. At the conference critical training in ML within the entire education community was called for; teachers and family, the media as a whole and business in general were requested to get involved in promoting a cyberspace free of violence. When adults acquire more crucial training in dealing with on-line interactions that generate violence, the more children will be inclined to be included and thus empowered in the face of these risks. As a consequence, there will be a more positive impact in the children's own empowerment.

- Promoting the protagonism of children in the application of prevention programs that address the risks of online interactions. Most documents analyzed indicate how prevention should also focus on the peer group. By empowering children as agents of creative use of the Internet and overcoming on-line risks, training other children or even their own community, one attains more effective programs (UNICEF Innocenti Research Centre, 2011; Wolak & al., 2008).

Some examples of international scope that already include direct participation are: the program ThinkUKnow³ from the UK and the international organization I-Safe⁴. Both are examples that may be useful for teachers. One can browse content designed for families, teachers and children of different ages and establish them as models.

-Designing strategies that include educational and informational media literacy from a humanistic and critical perspective. Media literacy has no meaning unless it is linked to a greater purpose which is the creation of a society based on a culture of peace and ultimately, as stated by Pérez-Tornero (2010: 122), contributes to building a world that is a good place to live, «to create a peaceful and interdependent world that constitutes a good place to live».

It is also necessary that children empower themselves in order to be active players in this change, from the building of a society based on a culture of peace, and in the promotion of their creativity to achieve this goal. Therefore, educational strategies must also include this perspective to advance a more humane and less destructive society. Children should be autonomously critical with their use of the media and self-critical with the impact of their use.

Once the main priorities on how to promote the empowerment of children are discussed, the next question is: What steps should a school undertake to achieve this empowerment?

First and foremost, teachers must be trained to confront this critical situation. Their training must be based on the most significant international recommendations with the greatest repercussions within the scientific community, as well as on the social impact it obtains.

For instance, having round table discussions (Aubert & al., 2008) on leading articles or books on the subject. Teachers must have access to cutting edge scientific literature in order to exercise their position as critical, intellectual educators (Giroux, 1989). Some topics in their training would be: how to work on media literacy by reflecting on how children themselves use the media; what the real risks are and what

they are not; which messages are key to prevention and which are a waste of time. At the same time, teachers need to be encouraged to share their training with families. It is essential to create spaces for debate and interaction between teachers and families so that both groups are better prepared than they are today.

Secondly, design specific and transversal strategies implementing media literacy learning, especially with the idea of further developing critical thinking. To do this it would be necessary to involve the students themselves in the design of educational activities to promote a critical understanding of abusive and violent interactions (either cyberbullying or grooming). Also necessary is the promoting of joint projects based on their creativity and collective intelligence (Levy, 1997) to help overcome such interactions. Teachers have the responsibility to ensure that the design and implementation of the activity are both carried out successfully. Continuous assessment of the activities and initiatives is essential to evaluate their results and impact. Therefore, it is necessary to establish mechanisms for this ongoing evaluation.

Thirdly, the risks discussed are those that affect the emotional development of children, therefore the emotional dimension must not be ignored. Ultimately, both grooming and cyberbullying are interactions that directly affect the self-esteem of victims and their deepest feelings. They also foment a sense of violence within those who carry out and support these acts. Therefore, when we talk about empowering children we also must take into account the interactions between them. Are they repeating social patterns without being aware of it? As teachers, have we given them enough media literacy to recreate their identities regardless of social influences? Finally, up to what point have we offered children the opportunities to learn how to counter on-line violence? A key challenge for media literacy is precisely to include the link between its acquisition as the basis for recreation of the self and values of active citizenship, namely nonviolence and solidarity.

4. Conclusions

The implementation of the MIL Curriculum in schools favours the empowerment of children in their use of the media. The acquisition of skills related to media literacy and informational training is essential for their education in a constantly changing world. The inclusion of a specific unit of content related to on-line risks in the MIL Curriculum is considered positive since it is one of the demands of teacher training.

In the unit analyzed the most common risks are

identified. In this article we have extended the description of two of them, cyberbullying and grooming. The prevalence of both risks in Europe, Spain and the United States is similar. The data clearly demonstrates the need to work on preventing these risks, including it in the daily education strategy as well as dealing with it in specific sessions.

It is essential that the application of the MIL Curriculum accompany the recommendations defined; the critical reflection of on-line interactions, the inclusion of the whole community, the leadership of children in educational activities and, finally, the aim of constructing a society based on a culture of peace with the children being the builders of a better and more just world to live in.

Footnotes

¹ Questionnaire on information technologies in the home. First semester of 2006 (National Institute of Statistics).

(www.ine.es/jaxi/menu.do?type=pcaxis&path=/t25/p450/a2006s1&file=pcaxis) (12-1-2012).

² Survey Parents and Teens (2006). Pew Internet & American Life Project. Research carried out by Pew Research Centre. (www.pewinternet.org/Shared-Content/Data-Sets/2006/November-2006-Parents-and-Teens.aspx) (12-1-2012).

³ www.thinkuknow.co.uk (12-1-2012).

⁴ www.isafe.org/channels/?ch=ai (12-1-2012).

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Media Literacy and Its Use as a Method to Encourage Civic Engagement

Alfabetización mediática como método para fomentar la participación cívica

ABSTRACT

Changes in technology have opened up a new kind of participatory citizenry; one in which engaged citizens' blog, post, tweet, upload, create, and otherwise interact with others online. This paper explores the intersection of media and information literacy with civic participation by examining three specific programs operating in the United States. These projects include «Powerful Voices for Kids», «The Salzburg Academy on Media and Social Change»; and «Cultivating the NetGeneration of Youth as Global Citizens and Media Literate Leaders in a Digital Age», in which educators and students at schools in the USA and Africa meet virtually and physically to explore collaborative methods that use media to build bridges of understanding. Through analysis of each program's practices and personal interviews with the program director, consistent methods for developing a strong media and information literacy program with a focus on democratic participation are revealed. These include a need for programs to reflect a respect for student interest in popular culture, willingness for program educators to put aside assumptions that students lack an interest in current events, recognition that technology use is a means to an end, not the ultimate goal, and the utilization of a support team for the instructors or educators.

RESUMEN

Los cambios en la tecnología han posibilitado un nuevo tipo de ciudadanía participativa; los ciudadanos utilizan blogs, correos, tweets, principalmente para crear e interactuar con otros. Este artículo explora la intersección de los medios de comunicación y la alfabetización mediática y su relación con la participación ciudadana, mediante el análisis de tres programas específicos que se llevan a cabo en Estados Unidos. Estos proyectos son «Voces para los niños» (Powerful Voices for Kids), «Academia de Salzburgo en Comunicación y Cambio Social» (The Salzburg Academy on Media and Social Change) y «Educando a jóvenes en Red como ciudadanos globales, alfabetizados mediáticamente en la era digital» (Cultivating the NetGeneration of Youth as Global Citizens and Media Literate Leaders in a Digital Age). En ellos educadores y alumnos de escuelas de Estados Unidos y África tienen encuentros virtuales y presenciales para explorar métodos colaborativos, utilizando los medios para construir puentes de entendimiento. A través del análisis de cada programa y las entrevistas personales con algunos de sus directores, se presentan métodos que consiguen un buen desarrollo de proyectos de alfabetización mediática focalizados en la participación democrática, incluyendo, a su vez, la necesidad de crear actividades que reflejen el respeto hacia el interés de los estudiantes en la cultura popular, la voluntad de los educadores para superar los prejuicios sobre su falta de interés en temas de actualidad, el reconocimiento de la tecnología como un medio y no como un fin en sí misma, y la utilización de un equipo de apoyo para el profesorado.

KEYWORDS / PALABRAS CLAVE

Media literacy, information literacy, democracy, participation, civic engagement, social change, youth media. Alfabetización mediática, alfabetización informacional, participación, democracia, compromiso cívico, cambio social, medios de comunicación juveniles.

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1. Introduction

What does it mean to be an engaged citizen in one's community or in the world? Is voting in a local or national election a sign of active participation? Or have recent changes in technology created an opportunity and an expectation for a new kind of participatory citizenry; one in which engaged citizens are those who blog, post, tweet, upload, create and otherwise interact with others online as proof of their deep involvement or commitment to their community or nation?

The news media reported on this unfolding reality in 2011 as numerous individual communities and countries relied on online forums and discussions, citizen journalists and photo-journalists, and community bloggers to set the agenda for civic discourse and eventually, for civic action. From the Arab uprising in several African countries to the «Occupy» movements starting on Wall Street in New York City and later taking place across the globe, citizens are taking advantage of the portability, accessibility, speed and viral-nature that online civic engagement affords. Participatory culture is «where members believe that their contributions matter» according to Jenkins (2006) in his paper «Confronting the Challenges of Participatory Culture».

For adults, these methods of engagement often tap into the cultural paradigms in which we live. How, then, are young people to gain the thoughtful, analytical skills necessary to engage as strong civic participants; whether in their local community or a more national stage?

«Interactivity is a property of the technology, while participation is a property of culture. Participatory culture is emerging as the culture absorbs and responds to the explosion of new media technologies that make it possible for average consumers to archive, annotate, appropriate, and recirculate media content in powerful new ways. A focus on expanding access to new technologies carries us only so far if we do not also foster the skills and cultural knowledge necessary to deploy those tools toward our own ends» (Jenkins, 2006).

Democratic governance requires both an informed citizenry and a citizenry free to express opinions. This freedom is enshrined in the founding documents of many nations and also international organizations. It is found in the Constitution of the United States in the First Amendment to the Bill of Rights. It is also expressed in Article 19 of the Universal Declaration of Human Rights adopted by the United Nations in 1948.

In western democracies a guarantee for this freedom was sought through private ownership of the

press, rather than government ownership. The authors of «Four Theories of the Press» identified four possible systems, each with a different relationship between the press and the state, including the Social Responsibility Theory and the Libertarian Theory. Private ownership was just one of the ways in which it was thought the «right» information could be shared and an informed citizenry created (Seibert, Petersen & Schramm, 1963).

The evolution of modern media corporations has shown that this attention to ownership structures did not adequately describe the conditions necessary for engaging citizens in dialogue. Modern media corporations were privately owned, but it was not clear that these corporations always provided a channel through which citizens could sufficiently express themselves. Often citizens were put in the position of consuming news and information rather than expressing their needs and viewpoints as active participants. But real discussion must take place. Real disagreements must be aired and real compromises must be sought. (Gutmann & Thompson, 1998) This is sometimes referred to as a discursive theory of democracy.

Deep discussion among citizens about their specific needs and interests is of paramount importance if an active citizenry is desired. This balance of theory and practice is a core component of Paulo Freire's concept of «praxis» or informed action. Freire believed education functions most successfully when teacher and student both use their voice for dialogue and discussion and that it is through that, sometimes difficult, dialogue that true alignment and action can take place (Freire, 2007). The concept of Participatory Action Research expands on Freire's work by recognizing that social change requires all involved parties to examine and discuss an issue or topic in order to change and improve it (Wadsworth, 1998). Often these discussions have taken place in public spaces, such as village squares. Today, this sort of participation takes place increasingly online, through mobile phones or other easily accessible technologies. For youth, this discussion often takes place in the classroom or an informal educational environment.

Henry Jenkins' call to develop the skills and culture knowledge necessary to deploy these tools speaks to the need for educational institutions to respond to this new requirement of civic engagement by teaching the necessary skills in the classroom. Civics lessons in middle and high school too often utilize a curriculum based on antiquated methods of civic engagement. A position statement from the National Council for the Social Studies states, «In the twenty-first century, par-

ticipatory media education and civic education are inextricable» (Rheingold, 2008). According to Pew Research Center's Internet and the American Life Project as of 2009 over 93% of teens use the internet, 60% of young people 12-17 go online to get news or information about current events or politics and over 70% use an online social networking site. (Pew Internet and the American Life Project, 2011) And yet, primary and secondary schools in the United States rarely integrate the online environment or any type of technology into the classroom as a method of civic engagement or active citizenry.

This paper will examine three programs using a media and information curriculum to engage students in concepts of democracy and governance, freedom of expression, editorial independence, and diversity in media. These concepts frame their activities, their curriculum, and their learning outcomes. In each case, creating an engaged citizenry was a core goal and media and information literacy education was the bridge used to make that happen.

The highlighted programs align with UNESCO's Media and Information Literacy Curriculum for Teachers (<http://unesdoc.unesco.org/images/0019/001929/192971e.pdf>); specifically Module 1: Citizenship, Freedom of Expression and Information, Access to Information, Democratic Discourse and Life-Long Learning, and Unit 2 on Media and Information Literacy and Civic Participation. The learning objectives focused on 1) understanding and describing the functions of media and other information providers as these relate to access to information and knowledge, self-expression and participation in democratic processes and 2) identifying the conditions needed for other information providers to perform those functions (Wilson & al., 2011).

2. Results

2.1. Global connections and exchange Africa

In Fall 2010 students in Africa and the United States began a multi-year, cultural exchange project titled, «Cultivating the Net Generation of Youth as Global Citizens and Media Literate Leaders in a Digital

Age». Three schools in Africa were paired with three schools in the United States: South Africa and California were paired, Uganda and Connecticut were paired, Zambia and Illinois were paired. In addition to the teams of students and educators at the six schools, partners in the project included World Link, the United States State Department's Global Connections Exchange program (GCE), and Net Generation of Youth (NGY). In a personal interview, Project Director, Dr. Ronnie Lowenstein stated, the

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project was a virtual and physical exchange program in which high school students shared «a commitment to fostering technology-enabled collaborations to build bridges of understanding in an increasingly interconnected world.

Participating schools utilized an inquiry and project based learning model of instruction pioneered by NetGeneration of Youth and aligning with the UNESCO MIL Curriculum for Teachers. Throughout the project, the educators and students engaged in virtual exchanges using technologies such as Skype, NING social networking, and SMART Bridgit conferencing software to facilitate online collaborations. Professional development opportunities enabled educators to design curriculum to develop technology literacy, as well as media and information literacy skills. Students developed proficiencies with technologies as they explored the role of interactive media in their communities, country and around the world. Lessons addressed radio, print, television and interactive media in the student's own country, as well as their partner

country and school. Project Director, Dr. Ronnie Lowenstein shares, «the project was designed to cultivate youth not only as analytical thinkers and critical consumers of media, but also as media leaders and creative producers of media who can construct effective multi-media messages that can then be shared with peers and adults around the world».

Each school set up an NGY Ambassador Club to recruit students and provide a framework for their activities. Students were required to meet weekly to participate in the media and information literacy discussions and online forums. But those required meetings soon blossomed into more frequent student gatherings as the students made deeper connections with their peers across the globe. Jane Nakasama, an African teen, posted this comment to her blog in June 2011, «All these messages that inform, entertain and sell to us every day...how do we look at them, do we easily consume them, condemn them, compliment them? It also comes to our part when we are the ones creating blogs and messages anywhere, what are our aims, sources, courses...do we analyse the crowd we are appealing to?». Jane's post shows her reflecting on her ability to analyze news and information provided to her by the media, as well as her own power as a voice in the media. She is engaging her critical thinking skills to consider how and why the media makes the choices it does regarding public interest, accountability, and questioning what is relevant news. As Lowenstein states, «We want them to be committed to civic life on a global stage».

Certainly programs linking students from different parts of the world have existed for years. But this project's use of media and information literacy as its core connecting concept sets it apart. Lowenstein sees media and information literacy as the most important and most unique aspect of the project. «People in the world are shaped by and shape the media in their culture. If we don't address the skills and understandings that help us to be literate with the media, we cannot engage with one another effectively. It's fundamental to the age in which we're living».

Each location was provided a basic curriculum and access to the NING collaborative online site, but implementation of the program at each location was determined by that individual team of educators and students. This constructivist approach was intentional so that each school team could develop the program that would best fit its students and educators needs. Lowenstein occasionally acted as facilitator in online discussions, gently pushing students to go beyond simply sharing basic thoughts about their community or

school to questions requiring analysis and deeper critical thinking. She encouraged them to consider how a particular situation might impact them as media leaders of the future. By selecting specific moments to encourage students to consider their broader role on the world stage, Lowenstein was able to keep the mission of the project clear in the student's minds and not be perceived as merely an intervening adult voice. Alignment with core elements of Participatory Action Research helped to assure that voices from the team, including educators and students, received as much attention as those of the project leaders and professional advisors. Core elements of the UNESCO Media and Information Literacy Curriculum for Teachers module on citizenship, freedom of expression, and access to information are integrated into the various activities. Students were consistently asked to reflect on their access to information and how to best evaluate the information they uncovered. By sharing news reports across borders students were able to compare news stories easily and discern how news media shapes the message differently depending on the author. Frequently, blog posts and discussions explored the impact of editorial independence. Access to the full media literacy discussions may be found (<http://ngygcce.ning.com/forum/categories/media-literacy-education/listForCategory>). Project website (<https://sites.google.com/site/ngyceafrica>).

2.2. Salzburg Academy on Media and Global Change

Sometimes a classroom is bound by four walls and a blackboard. Other times a space becomes a classroom based on need. Such was the case for the Salzburg Academy on Media and Global Change. Each summer since 2007, a small group of college students and faculty have been gathering at a historically significant castle in Austria to explore and create new methods of civic engagement using media. The Salzburg Academy on Media and Global Change is a program of the Salzburg Global Seminar, an international program for dialogue and understanding.

The Salzburg Academy poses the questions, «How can students be empowered through media literacy to be global citizens across borders and across divides? How can students use media to have voice?» Students and faculty from nearly ten countries across the globe attend the Academy for three weeks in July. According to Program Director, Paul Mihailidis, students are drawn to the program for a variety of reasons; learning about students beyond their own borders, an interest in media and information, and often a

yearning for international travel. Students know the experience will center on media literacy and civic participation, but they are not necessarily well versed in these topics before they arrive. To help this diverse group of participants arrive at the program with a similar framework on these topics, foundational readings in media literacy and citizenship are assigned as pre-readings. Participants are also asked to gather data about their country and its media and information use so that data can be synthesized across all participant countries and a global snapshot may be obtained. Previous pre-research topics gathered data on personal media use, a day without media, popular websites among college students, and trends in social media use. Once the participants are together the on-site learning begins. Early discussions center on the basics of media literacy and how understanding (or misunderstanding) of an issue is developed through media representations.

The conversations are not always easy. Participants often come to the program with strongly held beliefs about the «other» and how media has or has not influenced their views. In a personal interview with Program Director, Paul Mihailidis he shares, «We try to get them to understand that everything you don't see or experience first-hand, your understanding and reality is built through the media.

We want them to be empowered to understand this concept and to produce media without borders; to produce media that extends beyond their own home media outlets so that issues can be seen and discussed across borders». The informal setting helps encourage free-flowing conversation and leads to a different kind of dialogue than would be possible in a formal classroom. For many students, it's their first opportunity to ask questions about world issues with people that have experienced a particular current event personally and not just as a story on the TV news. Understanding how war looks and feels to a person who has seen it in their community provides a vitally different point-of-view for the student who has only ever learned of a particular topic through reports in the media. The residential feeling of the setting and sheer number of hours the students spend together helps to create an environment conducive to candid discussion. Students engage in a self-reflective experience in which they explore and question their own cultural frames and then consider how media has shaped those frames.

Throughout the weeks students work together in faculty-led teams to create learning modules on topics such as covering conflict, agenda setting, and freedom of the press. The mini-semester concludes with pre-

sentations of student-developed comprehensive curriculum for specific modules. Curriculum typically includes an overview of the topic, recommended readings, exercises, assignments, and multi-media elements. Through the Academy website these elements are made available to educators and others without charge.

Pedagogical approaches outlined in the UNESCO AOC curriculum on civic participation are integrated into the Academy's approach. Activities clearly build on concepts of truthfulness, public interest, proportional and relevant news, and independence. Many student discussions center on how to balance an engaged citizenry's need to publicly criticize the media (and many times, by extension, the government) with a government's stand on privacy. Examples of learning modules are available (www.salzburg.umd.edu/salzburg/new/news/news).

The program takes a unique approach to the topic of global citizenry and media and information literacy. Meeting in person and working, learning and playing together means that participants must engage with an significant level of honesty and vulnerability. Mihailidis says, «Nothing really replaces having a physical space where people are forced to let their guard down and engage». If the conversations become less respectful or tolerant he gently prods students to consider their role and responsibility in attending the Academy. He tells the students «you have been tasked with coming here to be change agents, to be exposed to different ideas. If we have trouble discussing topics in this neutral space, what will happen when we get back home? Can you get to a point where you can discuss these issues with others who feel differently?».

But it's the media and information literacy thread that truly sets the program apart. Students are not just learning how to use technology to tell a story or share information; they are learning to think critically about the media. Their discussions and learning modules integrate core media and information literacy concepts about authorship, access, ownership, and values. They are considering how one's culture impacts one's interpretation of the news. And they are considering how this information impacts one's decision to be a more engaged citizen.

2.3. Powerful voices for kids

The programs discussed in this paper thus far have explored a media and information literacy program for college students and a program for high school students. Is it possible to develop a program with a focus on civic participation for even younger students? That

was precisely the goal for the Temple University Media Education Lab project «Powerful Voices for Kids» (PVK). This program focused on a primary and middle school student population (five to fourteen year olds) at an urban school in Philadelphia, Pennsylvania, United States. The participating students were enrolled in a remedial summer school for the first half of the day and a supplemental youth media program was offered as an optional activity for the afternoon.

According to Program Director David Cooper Moore during a personal interview, the Powerful Voices for Kids program was developed as a university-school partnership. The three-week program served approximately 150 students. Undergraduate, graduate and alumni students from Temple University served as instructors, and the primary and middle school students were enrolled at the Russell Byers Charter School. A unique aspect of this program was its ability to create a strong academic experience not just for the young students, but for the student-instructors and the schools as well. The stated mission of the Powerful Voices for Kids program is «to strengthen children's abilities to think for themselves, communicate effectively using language and technology tools, and use their powerful voices to contribute to the quality of life in their families, their schools, their communities, and the world» (<http://mediaeducationlab.com/our-partners-rbcs>).

On the first day, students were grouped by age into «classes» and connected with an undergraduate, graduate or alumni instructor. It wasn't just the young students learning to analyze media and create media messages. For many of the instructors this was their first formal teaching experience. Others had taught but had limited-to-no experience teaching media and information literacy.

Adding further anxiety to the experience, there was no pre-set curriculum for the instructors to follow. Class time was used, in part, to discern student interest in a particular area of popular culture and teachers were expected to integrate those topics into the next day's lesson plan on a component of media and information literacy. Many days began and ended with the instructional team meeting together to brainstorm ideas and troubleshoot issues from the previous day. Topic areas and activities weren't just influenced by the student's interest; they were influenced by the instructor's experience and interest as well. If a particular instructor had experience or an interest in, for example, music production he developed activities around that interest. The central requirement was that the foundational concepts of media and information literacy be

integrated into the lesson plan. Instructor Osei Alleyne taught his students about music remix culture. Together, they researched the history and elements of remix culture and discussed relevant issues of copyright and ownership rights. Using Osei's music connections, the students visited a professional recording studio to produce their own remix using clips from the chorus of Eminem's «Not Afraid» and Gyptian's «Hold Yuh».

But lessons weren't just about learning how to use the technology; the focus was on using one's voice to be an engaged citizen. Early discussions uncovered concerns some young student's had about violence in their neighborhoods. Their remix spoke of that violence and contained a strong anti-violence message. The song was uploaded to an all-access website to share with friends, family and the community at large (<http://soundcloud.com/davemoorepvk/powerful-voices-for-kids-stop>).

Students in a different class expressed concerns about homelessness after seeing several homeless people on their way to school. Seizing on the students own desire to tell others about what they had seen, the instructor encouraged them to create a media project with homelessness as the theme. The students decided to write a song about homelessness. The instructor used the student's interest to help them understand the importance of getting multiple points-of-view when telling a story, especially when the story concerns oppressed or minority populations. As part of their preparation for writing the song, the students spoke with local homeless people. The song reflected on images of homelessness seen in the media and compared those images with the student's own experiences. Another instructor capitalized on his student's interest in recent news stories about flash mobs by helping them make a connection between the choices a reporter makes when gathering and editing news coverage with the choices a video game developer makes when designing a game. Using the program Scratch students created their own video game using the concept of flash mobs as the central theme. Students learned to evaluate mediated messages by using a local event as an example and began to recognize the impact media messages have on democracy and governance.

Moore shares that «despite the constantly evolving nature of the program, by week two students were already showing an increased understanding of the core concepts of media and information literacy and consistently making connections between those concepts and their impact on civic engagement and demo-

cratic discourse». They began to understand how the images and stories perpetuated in the media affected their belief systems and those of the people around them. The students gained skills in finding and evaluating sources and understanding more deeply the vital role the news media plays in encouraging citizen participation or discouraging it. The students began to understand how a news story could affect them personally, the impact of a poorly constructed news report, and the ways in which incomplete information can lead to citizen apathy.

In classroom after classroom, day after day, children made videos, produced simple videogames, created basic websites, analyzed news, visited a local TV station, deconstructed commercials and advertising, and participated in robust debates about current events. Students experienced an innovative pedagogy that combined play and learning in the course of media analysis and creative multimedia composition activities.

Through reading, viewing and listening to a variety of traditional and popular culture media texts, children learned how to think abstractly about questions of authorship, audience, and purpose across all types of media. Children experienced the power of being an author of different types of media productions including videos, poetry, music, news articles, videogames, and comic books, working individually and collaboratively so that they could engage more deeply with their communities and the world around them.

3. Discussion

Through a detailed exploration of these three programs certain consistencies are revealed signifying specific methods for developing a strong media and information literacy program with a focus on democratic participation.

All programs reflect a respect for student interest in popular culture. Particularly for younger students, connecting to popular culture is an effective way to gain student attention. For some students, the notion of democratic participation seems a distant topic from

their lives. Connecting to students through popular culture provides an access point for an educator.

All programs integrate student interests into the lesson plans. If the goal of a course of study in democratic participation is, ultimately, student participation, then it is vital that the student's own interests in current events are incorporated into the lesson plans. Note that in all the programs described above it was through student discussions that topics evolved and participation was

New technologies have made communication across towns, across countries, and across the globe increasingly available, easy and often instantaneous. For that communication to be effective requires the dual skills of media and information literacy, as well as an understanding of what it means to be a responsible, engaged citizen. The world is increasingly reliant on educational environments, in formal and informal settings, to help young people gain the skills and knowledge necessary to express their opinions and participate in their own governance.

enhanced. Educators, especially those with an interest in discussing certain key topics, may be tempted to forward their own current event agenda, but true democratic participation is more likely to be developed when the students themselves explore the issues and determine where their efforts should be placed. It is then the instructor's responsibility to make the bridge to current events that matter to the students. For many young people, popular culture is where they most likely already feel their voice is heard. Helping them to understand how to use that voice in other ways through the media is a necessary learning outcome for success.

All programs were led by educators willing to put aside any assumptions that students would not be interested in current events. Each program shows that when the current events speak to the interests and concerns of the students, the students engage enthusiastically.

All programs used technology as a means to an

end, not as the ultimate goal. In each program, students learned about new technologies and how to use them. But this use was always in the service of a broader goal, that of helping the students to become more active civic participants. Students learned how to use a particular technology so they could tell their story about a specific issue affecting their community or the world: not just to gain proficiency in the technology.

All programs utilized a support team for the instructors or educators. Most often, this support team was comprised of colleagues either new to the topic of media and information literacy, new to the topic of democratic participation, or new to the specific activities. It seemed less important that the support team be experienced in any particular area than that the support team meet consistently to discuss ideas, challenges and outcomes and be willing to try something new the next day.

It is worth noting that while these consistencies certainly bare out across the three programs detailed in this paper, there are numerous other programs taking place in the United States focusing on the intersection of media and information literacy and civic engagement. Prime Movers (www.primemoversmedia.org), the Center for News Literacy (www.centerfornews literacy.org) and Project Look Sharp (www.projectlooksharp.org) are just a few of these programs.

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ledge necessary to express their opinions and participate in their own governance.

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Film Literacy: Media Appropriations with Examples from the European Film Context

La alfabetización fílmica: apropiaciones mediáticas con ejemplos de cine europeo

ABSTRACT

The increasing development of new multimedia materials as supporting vehicles of film languages has raised some global literacy questions and problems within teacher training. These new literacy problems pose a specific curricular question: How shall different media, social and cultural contexts approach the specific training of teachers (and, in fact, media makers) in order to address those global problems of a common film language with the corresponding civic and curricular appropriations? The UNESCO MIL Curriculum for Teachers places media and information literacy at the core of lifelong learning for the acquisition of necessary civic competences within a universal perspective. A review of some European case studies helps us to understand some of the most contemporary interrelations between the predominant multimedia messages and their communication channels and social networks, taking account of the preservation of the collective memory of sounds and images as a form of cultural heritage connected to the audiovisual cultures of the world at large, since these processes never occur in geographical or cultural isolation. The aim of this article is to present the context of a possible inter-disciplinary and inter-cultural approach to a global film literacy process, taking some interesting European case studies that appeared in «Comunicar, 35» as a starting point.

RESUMEN

El creciente desarrollo de nuevos materiales multimedia como apoyo al lenguaje fílmico ha promovido y generado algunos interrogantes y problemas en torno a la necesaria alfabetización global, así como nuevas perspectivas en la formación de los docentes. Así han surgido nuevos interrogantes sobre el currículum en medios: ¿cómo sintonizar la formación específica de los docentes con la dinámica diaria de los diversos medios de comunicación en contextos culturales diversos, con el objeto de aproximar los problemas globales a un lenguaje cinematográfico común, poseedor de apropiaciones cívicas y curriculares contemporáneas? El Currículum MIL de la UNESCO (Media and Information Literacy), destinado a la formación del profesorado, sitúa la alfabetización mediática e informacional en el centro del aprendizaje a lo largo de toda la vida, así como en la adquisición de las competencias cívicas necesarias desde una perspectiva universal. Este trabajo plantea el análisis de algunos estudios de caso europeos para comprender las actuales interrelaciones entre los mensajes multimedia predominantes, sus canales de comunicación y las redes sociales, teniendo muy presente la importancia de la conservación de la memoria colectiva de sonidos, imágenes... como patrimonio cultural conectada con las diversas culturas del mundo, y sabiendo que estos procesos jamás ocurren geográfica y socialmente aislados. En esta propuesta se avanza un posible modelo interdisciplinario e inter-cultural para una alfabetización fílmica global, partiendo de estudios fílmicos de casos europeos, seleccionados de las aportaciones de «Comunicar, 35».

KEYWORDS / PALABRAS CLAVE

Film languages, media literacy, civic appropriations, European collective audiovisual memory, film culture, new media.

Lenguaje fílmico, alfabetización mediática, apropiaciones cívicas, memoria colectiva europea audiovisual, cultura de cine, nuevos medios.

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1. Introduction

The UNESCO Media and Information Literacy Curriculum for Teachers (backed up by the Alexandria Declaration of 2005) clearly places media and information literacy at the core of lifelong learning as a means of acquiring the competences that «can equip citizens with critical thinking skills enabling them to demand high-quality services from media and other information providers. Collectively, they foster an enabling environment in which media and other information providers can provide quality services» (UNESCO (2011: 16). To this end the UNESCO MIL document describes aspects of the major pedagogical approaches that form the main strategies, or guidelines, for the use of the MIL Curriculum, such as the Textual and Contextual Analysis of different media objects, such as films (UNESCO (2011: 37).

These guidelines urge a reflection on the necessary training of teachers in order to acquire the required competences to develop those approaches.

The increasing development of multimedia materials as supporting vehicles of filmic language has raised some new questions and problems within media studies and within different pedagogical approaches. One of the most important problems enunciated in those contexts is one that questions the extent of the media limits of the different vehicles supporting the original works. That is, up to what point are we still watching a given film when it is shown, no longer on a big screen projected from a celluloid reel (the presentation form for which it was conceived) but on a small television or computer screen beamed from a file, a DVD or laser disc and controlled through sequences of computer commands, each involving different pedagogical effects? This problem is not entirely new and we can recognize some parts of it in former discussions about the differences between cinema and television, or cinema and video for educational purposes. Nevertheless, there are some new aspects that confer a more pluridimensional character on the problem when in a multimedia network context. To approach some of those aspects is an attempt to contribute to the global reflection on the increasing development of the multimedia information and communication technologies, their real nature and pedagogical value for a higher degree of media and film literacy.

2. From the moving image to the moving mind in time

Since the very beginning of film, history film enthusiasts of all kinds, but especially industrialists and other film entrepreneurs, have been rather optimistic about

the large possibilities of using films in educational environments. Thomas Edison, for example, is supposed to have said in the early twenties, according to Larry Cuban (1986: 9): «I believe that the motion picture is destined to revolutionize our educational system and that in a few years it will supplant largely, if not entirely, the use of textbooks».

As we know today, it did not happen exactly that way. But, in spite of the failure of the prophecy, there are many other links and connections that have been established between motion pictures and education to our day, and I think that this process is far from being completed. Those connections are not always clear enough or so well known in the media and educational fields, whose agents are, generally and intuitively, aware of the existence of some dimensions of mutual influence, but who do not act so often, at least consciously, in consequence of their presence and implications.

Some of those dimensions present quite a number of really specific and almost palpable characteristics that assume great importance for the global communication process, and therefore educational process, going on in modern societies, of which, cinema, television, video, books, pictures, texts, sounds, computers, records and other media devices are integrated parts. To research and study this complex media body is a task of great importance in general and of specific relevance in what concerns film and its languages.

In fact, Edison was not the only one with rather optimistic visions for the development of the field, and we could think that at least some of the more obvious structural connections should have been normally established between the fields of audiovisual communication and education. There are, indeed, many links between both fields, but we cannot say, in a general way, that there are many stable institutional links between the different nations' communication industries and their educational systems, though a few exceptions can be noticed.

Travelling in time and technology, since the Edison epoch to our own epoch, we could turn our attention to other industrialists, or technology traders, and notice their beliefs, not only concerning film as a powerful pedagogical medium, but regarding multimedia as global phenomena, in which cinema and films are taking continuously a growing part. John Sculley, a former chief of Apple Computer Inc., wrote in his foreword to «Learning with Interactive Multimedia»: «Imagine a classroom with a window on all the world's knowledge. Imagine a teacher with the capability to bring to life any image, any sound, any event.

Imagine a student with the power to visit any place on earth at any time in history. Imagine a screen that can display in vivid colour the inner workings of a cell, the births and deaths of stars, the clashes of armies and the triumphs of art... I believe that all this will happen not simply because people have the capability to make it happen, but also because people have a compelling need to make it happen» (Ambron & Hooper, 1990: 7).

It is very interesting, to notice that the differences between both beliefs in the pedagogical power of the media are almost non-existent. However, this reveals more about how intensive and constant the industry's expectations to penetrate the educational markets have been over the years, than it shows some really tested perspectives for the different media within different pedagogical contexts. Nevertheless, we have to admit that these perspectives are now much more realistic than ever before, because of the new technological multimedia contexts. This means that we can no longer dismiss them as a bunch of new/old prophecies based on the industry's best wishes. In fact, some of them are already happening – Youtube being a good example. Thus, we must deal with them, trying to discover what are the new facts that characterize the media, their materials, their languages and their real implications, mainly from a pedagogical point of view, upon the communication processes that can be developed towards different audiences, even if the audiences consist of one only receiver at the time, within a formal educational context or any other possible context.

Some comparative studies of different pedagogical experiences done with multimedia materials which were based upon the educational use of cinematographic sequences and their reception conditions, provided the opportunity to observe some main tendencies, with regard of broader intertextual aspects such as the multitude of cinematic facts and hypertextual information that usually follow along with a given filmic multimedia material, such as different spin off materials and devices. Those tendencies were:

1) Filmic material on discs or in files, especially

feature films, is still considered, in general, very interesting and attractive pedagogical materials.

2) The use of filmic materials is more effective when it is registered upon a physical support.

3) The related pedagogical processes are more stimulating if the filmic materials and the manipulation software are interconnected and compatible structures.

4) The filmic structure of the pedagogical materials and their language and narrative systems seem to

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remain interesting and attractive devices especially if they are connectable to each other, or to other pedagogical devices, such as hypertext film comments, or other cinematic information and literacy facts.

These tendencies may change with the nature of the end users aims and expectations, but in general we may say that they reflect some of the most important pedagogical implications that proceed from the main structural characteristics of the most common multimedia materials that use filmic language devices. Specially, they show that the interconnections between different levels of reality, fiction and virtual reality appear to have a rather complex nature assuming, consequently, a rather complex system of pedagogical effects. In turn, the use of filmic language within a multimedia context reflects with particular sharpness some of the problems that occur in different environments of multimedia users, either they are teachers, students, or other ordinary media consumers: the hyper-real character of the filmic media; the substantial degree of mutation that distinguishes the manipulation of those

media through different tools; the huge quantity of information at the user's disposal in each frame, image, sound or their sequence; the necessity to close or open the structures of multimedia systems in order to establish different possible pedagogical patterns and exploring ways. So, the user of a filmic multimedia material, in front of such phenomena, has always the possibility of playing different roles in interaction with those materials and that is why the user, teacher or student, needs specific training and adequate literacy to play those roles.

more powerful one. So powerful that, probably, he will not confine himself to the role of a reader and will become, in fact, a new creator with almost unlimited possibilities to manipulate the original work and even preserve his manipulation as a new work to be watched and studied, i.e., the user may easily become an author and a creator. Such a phenomenon necessarily implies, from a pedagogical point of view, a vast range of complex literacy problems: towards the materials and their language systems (hardware and software); towards the pre-established working strategies to inter-

act with the materials; and mainly, towards the structures those combine and integrate all those items. In principle, we may say that an open structure will always be more effective, from a pedagogical point of view, than a closed one, in spite of the many exploring ways that a closed multimedia filmic material may offer to its user, these will always be in a limited number, while the query patterns and manipulation possibilities of a material with an open structure are, in fact, unlimited. This fact, only, implies a great demand of film and media literacy.

Besides these textual and contextual aspects there are, of course, also problems of legal and authorial character that need to be addressed. The user should never forget the

authorship implications of the original work. Although we will not approach these problems here, since from a strict pedagogical point of view they are not relevant in this context, these aspects should be properly addressed within other curricular contexts.

We are now obliged to analyze the possible risks of the loss of this collective property, which is often incredibly insubstantial and for that reason all the more valuable. To do this, we must also preserve, articulate and systematize some of the main features of the processes of cultural communication as phenomena of collective memorization and learning. As so many scientists and researchers have stated over the years, in the exercise of their scientific irreverence and theoretical restlessness, the scientist is hardly ever able to take a step back and view science, in space and time, in such a way that he can see it move, «and yet, it moves».

3. Films as texts

One of the most important roles is the role of the receiver decoding the filmic message through the specific devices of the multimedia materials. He is generally no longer the abstract spectator taken from the collective darkness of the movie theatre, nor is he, anymore, the single manipulator of a non-intelligent video cassette recorder with rather limited possibilities of intervention upon the original work. The user/receiver of the filmic multimedia material is, indeed, a reader of multiple texts, but his role will not only be that of a reader, as Umberto Eco (1979) has presented him to us before, creating meaning through his mental capacity of recognition, interpretation and association. He will be a much more active reader and especially a much

4. The question of Interactivity

Some of the main questions regarding pedagogical strategies to approach the different multimedia filmic materials present, generally, a common keyword: Interactivity. Nevertheless, interactivity does not mean exactly the same in all materials and its possibilities of manipulation may be quite different according to the structure of the material. A more open structure usually offers a higher degree of interactivity than a rather closed one. In my opinion, and again from a peda-

gological point of view, one can only say that a multimedia material comprehends an interactive strategy when it offers a real possibility to the user to act upon the original work, preserving his results. Such a procedure represents, indeed, a wide range of new pedagogical possibilities and although there is, in general, a rather strong charge of didacticism impregnating the most common strategies of interactivity, this could tempt us to predict that the field is not too far from achieving a vast line of materials well suited to the most different of pedagogical aims. But, however it may be, we can never forget that the individual aims of the user may be quite different in essence depending from the context of his usage. He may just want to be entertained, viewing the film and playing the game, not giving it another thought, or he may have some critical, pedagogical or aesthetical aims. The multimedia authors and editors are certainly aware of the possible existence of all those user aims. Thus, the certainty of this usage will not depend only from the aims and strategies of the materials and of their producing institutions, but also, and in a very high degree, more often from the role that the user will be playing, or at least from the role that he will be given to play. We know from the recent past that some television movies have been designed and produced according to specific language patterns that are well suited to television's way of grabbing an audience, as for example, a large number of close up shots and highly fragmented redundant sequences synchronized with some easily identifiable popular musical scores. We do also know that some actual examples of feature films have been screened in so-called interactive movie theatres. And the industry, naturally, will try to explore every technological and media novelty in order to grab larger audiences. But, in general, any film that was made in the past, or that will be made in the future within a normal film production context, will do: westerns, comedies, science fiction, tragedies, horror movies, documentaries, etc. Any film, or genre, will easily fit in exciting multimedia packages, instructional or for pure entertainment, with different aims and implying different utilization strategies, and consequently with different pedagogical implications, aiming at different audiences. We run the risk, of course, of finding ourselves playing video games instead of watching the film works of some of the major profiles in the history of film art, that will depend from which point of view the user will be looking at it and, of course, it will depend from his degree of film literacy. From a pedagogical point of view, any filmic multimedia material may become a very effective material, although of rather complex evaluation, since

it is, almost always, potentially incredibly didactic, but yet, still interesting as long as it preserves in its mutant structure all the original language mechanisms intact, in order to keep on offering to its audiences the possibility of a dramatic and exciting perceptive experience, no matter what kind of interactive strategy the audiences may choose. But the main problem will be to know how to train the teachers with adequate skills in order to be able to approach, in a pedagogically effective way, those complex realities and virtual-realities that have been enunciated above?

5. Do we need Media Education to achieve Media Literacy?

In fact, most of the times, we can become media literate just by being exposed to the media, without any formal media educational process, since all processes of media exposure contain some kind of media pedagogy that forms and conforms the media users (senders and receivers) in many ways, developing production, reading, interpretation and reproduction mechanisms, of which, many times, the very same senders and receivers are simply not aware. When this happens (and it happens quite often) the media users maybe functionally media literate in some degree, but they are, nevertheless, alienated in several ways concerning the pedagogical processes that take place within their public and private media spheres. Then, some more specific media education processes may really become important in order to achieve some better media literacy results, both for media readers and media makers.

It was with this in mind that a group of independent scholars and experts from different countries and institutions gathered together to join their efforts around the attempt to produce some kind of a Media Literacy common approach that became to be known as «The European Charter for Media Literacy», which was in fact a public declaration of commitment to some essential Media Literacy factors, such as: «Raise public understanding and awareness of Media Literacy, in relation to the media of communication, information and expression; Advocate the importance of Media Literacy in the development of educational, cultural, political, social and economic policy; Support the principle that every citizen of any age should have opportunities, in both formal and informal education, to develop the skills and knowledge necessary to increase their enjoyment, understanding and exploration of the media». (www.euromedialiteracy.eu/about.php).

Coming to this point, it means that we will have to develop formal and non-formal media education stra-

tegies for school environments, for parental environments and, necessarily, for professional media environments. Since we know that the media industries are usually almost completely closed to such pedagogical approaches, it means that we will have to concentrate our efforts on the environments of academic media training, that is, universities and other media training centres. Within this perspective, besides journalism, the other fields of major importance to be concerned with media education and media literacy are film, videogames, music, advertising and, because all the media tend to converge towards it, the internet.

Some of these aspects were already raised in earlier contexts, in an attempt to develop some reflection and discussion about their nature: «The Internet is actually the largest database for information support in the daily life of individuals but even institutions and services. Among those we can count students and teachers, but also media and opinion makers, as well as information providers including journalists. When it is essentially used as a path for communication channels for electronic messages, the web contains a series of useful information, presented by individuals, institutions, governments, associations and all types of commercial and non-commercial organizations. But who are the gate-keepers of that electronic flow? Who makes up the major streamlines of the global agenda? How and where are the most powerful editorial lines shaped? Beyond the boundless and instantaneous allocation of data, the Internet developed new ways for cultural, economic and social life. This development is related to communication instruments and access to the communication and information industries. It is apparent in politics, education, commerce, and in many other fields of public and private character. All these areas contribute to the rapid change of our traditional paradigms of public sphere and space and we don't know yet if our position as individual and social actors in the above is changing as quickly and maybe we are not yet completely aware of the implications of such changes. The potential threat of widespread alienation in such new environments of media exposure should not be dismissed lightly» (Reia, 2006: 123-134).

6. Do we need Film Literacy?

Film, is probably the most eclectic and syncretic of all media and it has an incredible power of attraction which is replicated in all other media through the usage of film languages in any kind of media contexts: music videos to promote music; real footage to enhance videogames; film genres and film stars to reach

publicity targets; film inserts and excerpts of all kinds in «YouTube», «Facebook», «Myspace» and millions of other websites in the internet.

Film, in its many different forms, became the most common vehicle of those New Environments of Media Exposure, thus, becoming also one of the most important instruments for a Multidimensional and Multicultural Media Literacy among the many different media users, consumers, producers and «prosumers» of all ages, social and cultural levels, although different levels of media literacy, their nature or even their lack can show differences or similarities, according to the local and global contexts where they are developed and practiced: «Appropriations and usage patterns of these media technologies are in many ways rather specific, so one of the main risks, in a media literacy context, is the danger of generalization about common patterns of appropriation. However, one general feature in our attitudes towards these media cultural effects has been taking them as they were often ambivalent: television is still seen both as educational and as a drug; mobile phones are perceived both as a nuisance and as a life-saver; computer games are viewed both as learning tools and as addictive timewasters and film has been looked at since the very beginnings of the 7th art as a medium of great educational power as well as a medium with an enormous range of escapism dimensions» (Reia, 2008: 155-165).

The urgency to approach film, its languages and appropriations as a main vehicle of media literacy has also to do with the enormous importance of this medium in the construction of our collective memories. The richness and diversity of the film languages, techniques and technologies of film are seen as instruments of great importance, from the primitive films of Lumière and Méliès to the most sophisticated virtual inserts in YouTube. Their role as vehicles of artistic and documentary narratology and as factors of authentic film literacy, acquires an absolutely unquestionable importance in any society that calls itself a knowledge and information society as constructive contributions to our collective and cultural memories.

Having this in mind, specially within the new context of media policies that are expected to be developed all around the world and consequently some possible new media and film literacy approaches, it was a task of major importance to produce the thematic dossier of «Comunicar, 35» concerning the role of «Film Languages in the European Collective Memory» (Reia, 2010). Let us now see how its content can help us to establish some links to the necessary global media literacy strategies that have to be drawn, especially in

what concerns the training of teachers in order to be able to deal with multiple film and audiovisual literacy challenges.

7. Five «Easy Pieces» of Literacy – 5 case studies in «Comunicar, 35»

Paraphrasing the film of Bob Rafelson (1970), one should always find some «easy pieces» to put together our capacities, our cultural stories and our memories. That was the challenge that was taken by the authors of *Comunicar 35* – putting together different film literacy approaches in an attempt to build up some cultural bridges among different generations, movements and appropriations concerning the European collective film memory, presented here as a case study and an example of many other possible film literacy approaches.

The conservation of the collective memory of sounds and images as a European cultural heritage means acknowledging the various evolutionary contexts of audiovisual communication in Europe as well as their relations with the cultures of the world at large, as these processes never occur in geographical or cultural isolation. The language of film takes on a vital role in these processes of communicative and educational evolution as a vehicle of collective communication and education, that is, as a factor for an in-depth learning of the most varied domains of human knowledge – i.e., multiple literacies, including media and film literacy.

It is also important to examine the evolution of the pedagogical dimensions of audiovisual communication in general and cinematographic education in particular as the true starting point for an entire cultural repository that we cannot neglect or ignore, otherwise we risk casting into oblivion some of the most important traces of our European cultural identity which, by their nature, are often so fragile. We are therefore obliged to delve into the media, channels, technologies and language we have developed for over a century to add clarity to the collective creativity and necessities of the artistic and documentary narration that represents us and which enables us to reflect on our own human condition. But strange though it may seem, the societies, sciences and technologies within which these

narratives develop can also suffer from memory loss, just as we as individuals are forgetful or get old and are unable to regenerate the hetero-recognition mechanisms, and sometimes not even self-recognition, or because we cannot distance ourselves sufficiently from our prevailing knowledge and narratives in order to gain a more holistic, universal and reflective perspective. It is not because artists, scientists or pedagogues, like other human beings, have a «short memory», but because the arts, sciences and technologies and their languages are closed off and isolated within their own

Film, in its many different forms, became the most common vehicle of those New Environments of Media Exposure, thus, becoming also one of the most important instruments for a Multidimensional and Multicultural Media Literacy among the many different media users, consumers, producers and «prosumers» of all ages, social and cultural levels.

particular spaces and sometimes separated from knowledge, application and even dissemination. This can happen in any branch of the arts or sciences, even when the fundamental principles of their languages belong to education or communication, which in itself is an enormous contradiction. Thus the technological and communicative supports of the records of the individual and collective production of knowledge turn inwards in their apparent self-sufficiency from the standpoint of the evolution of communication, taking into account the technological and linguistic development of the past century, which has shown itself to be fairly redundant as well as being a reducing agent that has erroneously and inefficiently preserved the procedural knowledge of construction and communication of scientific or cultural learning. Consequently, we are now obliged to analyze the possible risks of the loss of this collective property, which is often incredibly insubstantial and for that reason all the more valuable. To do this, we must also preserve, articulate and systematize some of the main features of the processes of cultural communication as phenomena of collective memorization and learning. As so many scientists and

researchers have stated over the years, in the exercise of their scientific irreverence and theoretical restlessness, the scientist is hardly ever able to take a step back and view science, in space and time, in such a way that he can see it move, «and yet, it moves». And, as it was said before, the role of Cinema and Film Languages as vehicles of artistic and documentary narratives, in a comprehensive and holistic perspective, acquires an absolutely unquestionable importance as a factor of authentic media and film literacy, as it may be seen in these 5 different approaches gathered together, among others, in the thematic dossier of «Comunicar, 35» (Reia, 2010):

1) Cary Balzagette –was the head of the BFI's department of Film Education for many years and her intellectual authority is recognized by many other authors when she refers to the vital, leading role of the BFI in this field– by presenting the main pedagogical approaches to film language, especially in what we call film pedagogy, as developed within the broader activities of the BFI, which pioneered an educational perspective for the media as a process that resulted in broader interest in media literacy and film literacy in particular. Her article «Analogue Sunset, The educational role of the British Film Institute, 1979-2007» (Balzagette, 2010), traces the main lines of activity of the BFI in this field over the last 25 years, its continuous educational approaches clearly demonstrating that the study of cinema and films is absolutely essential for understanding the world and times we live in.

2) Michel Clarembaux –director of the Audiovisual Centre (CAV) of Liège, Belgium– develops a reflection on the theme «Film Education: memory and heritage» (Clarembaux, 2010), within which film education is identified, especially in these times of transition and migration in digital environments, as an urgent need to construct a profound literacy media, given that the importance of film language cannot be underestimated in the development of the capacity to analyze contemporary media, in which cinema stands out in its various forms and supports as the «supreme art form of memory», be it individual or collective. The author also suggests we can and should bring about a convergence between some kind of «pedagogy of film education» and a desire on the part of the public to preserve the collective memory of a broader and more varied cultural heritage, pointing with concrete examples of specific films and authors to support this hypothesis, but also remembering the importance of film clubs in this context.

3) Andrew Burn –professor of Media Education at London University's Institute of Education– contribu-

tes with his article, «Thrills in the dark: young people's moving image cultures and media education» (Burn, 2010), in which he discusses the role of film language in this era of transition among media, channels and cultural environments, taking horror movies as a study object. He takes cinema and videogames as an example, and emphasizes the hybridization of the genre and the transmutation of forms of interaction among the young and the media, film channels, and real and virtual videos; he shows how a particular love for horror and disaster movie genres in North American cinema, but also in Europe, still persists among the young, whose influence extends to other audiovisual forms, genres and products to the desperation of many anguished teachers who are inclined more towards prohibition than towards the more complicated option of studying and analyzing these terrifying-loving objects that are so attractive to the youngsters.

4) Mirian Tavares –a Professor of Visual Arts at the University of the Algarve– emphasizes in her article «Understanding cinema: the avant-gardes and the construction of film discourse» (Tavares, 2010) the huge importance of the historic avant-gardes in the construction of film discourse and how they were essential in gaining recognition for cinema as an art form, offering their perspectives within the cross-roads of these key concepts towards a possible renewed film literacy.

5) Enrique Martínez-Salanova –author of the «Creative Classroom of Cinema and Education» (Martínez-Salanova, 2010)– writes about «Educational Systems in the Heterodox History of the European Cinema», proposing a network of analyses that links specific films to traditionally difficult educational topics like violence, exclusion, marginalization and neglect.

8. Conclusions

Although these case studies are benchmarked by the cultural context of European cinema and European film literacy appropriations, it seems quite adequate to conclude, according to the general analysis of the evolution of the different media landscapes in the beginning of this text, that these reflections may well be taken into consideration for other similar literacy approaches in other places and within other cultural contexts, such as those that may be developed along with the desirable different appropriations that may be possibly achieved within the UNESCO Media and Information Literacy Curriculum for Teachers, since for Cinema as for Art, their various languages and their different technological supports have the ability to help us to simultaneously preserve factual records of

events as well as the capacity to approach all those events and the global phenomena that surround them in an inclusive, holistic and universal way.

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Resources for Media Literacy: Mediating the Research on Children and Media

Recursos para la alfabetización mediática: investigación y propuestas para niños

ABSTRACT

Much has been said and written about media education, its relevance and goals. Beyond directives, resolutions or recommendations, research in this area has deepened the foundations of media education but has also emphasized its weak points or faults. One of these critical points noted in the training and research work developed at the University of Minho, Portugal, in the last 20 years is the non-existence of resources and materials that could be used to promote media education in different contexts. But this is not just about the availability of materials, it concerns the importance of putting knowledge into practice and of mediating the knowledge produced with the appropriate audience. This concern was the basis of the 'Media Education in Booklets' project carried out by the Society and Communication Research Centre and funded by the Evens Foundation, Belgium. This paper presents the resources produced by this project in the form of three booklets: the first deals with the mediation of TV at school and at home; the second describes videogames, ways of playing, benefits, dangers, creativity and interculturality; the third is about the Internet and social networks, and the new forms of relationships and communication that these allow.

RESUMEN

Mucho se ha investigado sobre la educación en medios, su importancia y objetivos. Más allá de las directivas, resoluciones o recomendaciones, la investigación en esta área ha permitido profundizar y solidificar sus fundamentos, al tiempo que ha facilitado el reconocimiento de sus puntos más débiles u omisiones. Uno de los puntos críticos destacados por la formación y por el trabajo de investigación que se ha desarrollado en la Universidad de Miño (Portugal) durante los últimos 20 años, es la inexistencia de recursos y materiales que puedan utilizarse para la promoción de la educación en los medios de comunicación en diferentes contextos. De esta forma, independientemente de los recursos y materiales, se genera la importancia de la transferencia de conocimientos a la práctica, la trascendencia de la mediación del conocimiento producido a su público. Esta preocupación fue la base principal del proyecto titulado «Recursos para la alfabetización mediática» llevado a cabo en el Centro de Estudios de Comunicación y Sociedad y financiado por Evens Foundation (Bélgica). Este trabajo presenta sucintamente los procesos de creación y los resultados generados por estos recursos, centrados en tres medios: televisión, videojuegos e Internet y redes sociales.

KEYWORDS / PALABRAS CLAVE

Media literacy, knowledge mediation, children, youth, school, family, television, videogames, social networks. Alfabetización mediática, mediación del conocimiento, jóvenes, escuela, familia, televisión, videojuegos, redes sociales.

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1. The importance and meaning of media literacy resources

In recent years, media education has risen to the top of the agenda of major international organizations. «Media literacy is a paramount goal of the EU's public policy» was a statement of intent that launch a series of action programs, as emphasized at the time (Reding, 2009) by the then European Commissioner for the information society and media. UNESCO, in particular, has been developing initiatives to define consistent indicators of «media and information literacy» (Grizzle, 2011). On a local level these trends represent a significant stimulus, while encouraging private initiatives to explore a horizon of meaning and map framing; yet these initiatives in themselves are not enough to produce successful actions and projects. They require, among other things, incentive plans and inspiring resources for their development.

Since at least the 1970s, the definitions of media education have clearly distinguished it from other concepts related to «educational media» or «educational use of media». For example, in 1973, the UNESCO-linked International Council of Cinema and Television defined media education as «the study, teaching and learning of modern means of communication and expression, defined as a specific and autonomous domain of knowledge, both in theory and in pedagogical practice». The Council also pointed out that this area cannot be confused with the «use [of the media] as an auxiliary for teaching and learning in other fields of knowledge such as mathematics, science or geography» (UNESCO, 1984: 7).

The same could also be said for ICT and their place in a communication and educational landscape that has changed greatly in recent decades. But this is not to say that media education does not require tools and resources developed with accuracy and interest. In the case of the media, the diversity of means, language and gender, together with their role in the expression and enunciation of contemporary life, provide an inexhaustible fountain of resources, making the media a necessary and unavoidable study subject and a space propitious for expression and communication between individuals and groups.

However, it is important to consider that the production and use of resources is only one of the dimensions of the development of initiatives and programs in this area. Teacher training, intervention in the field, scientific research and the definition and implementation of policies are other dimensions which have to be considered, independently or in relationship to each other.

Once the dimension of resources has been contextualized, it is necessary to clarify the understanding we have of them. Contrary to current ideas, it seems reductive to confine the concept of resources to support materials, action guides and economic aspects. Certainly these dimensions are necessary, but in our view they are not enough. In this context, the human dimension represents a touchstone and sign pointing to the direction that the media education plan can take.

In what sense can we, and should we, consider the human factor as a resource? In three dimensions:

a) Networks of knowledge, in relationships and projects that welcome the contributions, competences, knowledge skills of each member of the network, be they a person or an institution.

b) Organizations as resources, their objectives, organization, action plans, their moments and important events. For example, a school can be understood as a space of relationships that promotes (or inhibits) the action.

c) The enunciation and circulation of testimonies, reflections, statements and goals formulated by different actors that are sources of inspiration, and that could enhance collaboration.

Adopting such a perspective thus opens up surprising horizons with regard to resources. It also somehow relativizes a recurrent discourse about the «lack of conditions» which, in some cases, is merely an excuse for inaction. In reality, all actors directly or indirectly involved in media education are potentially –and literally– producers of resources, while also being nodes of a vast network of people and institutions¹.

Although the media are not prodigal when reporting on what they do and on scrutinizing their own role in society (as opposed to what they do for other entities), what they publish and broadcast provides material of primary importance for media education. The same is true for self-regulatory bodies such as ombudsmen, and hetero-regulatory bodies like the media regulatory authorities. In both cases, they are sources of rich material for reflection and analysis. In addition, several companies and media groups, some for altruistic reasons, others for more commercial motivations, have also launched projects and initiatives related to media literacy. Official programs –from governments, international organizations, NGOs, etc.– are often a source of useful and effective material (which does not mean that they should not be subjected to critical analysis). In this sense, academic works resulting from studies and research are increasingly accessible through national and transnational repositories, and can be a very important resource because of

the clues for further reading they might provide. Last, but not least, reports of experiments carried out in classrooms, in different curriculum subjects, in after-school and training activities in contexts other than schools, represent an inexhaustible supply of inspiration and attention, if only to indicate the paths or solutions that should be avoided. In this context, the Internet and, particularly, tools and interactive and digital platforms as well social networks go beyond opening doors to a wide range of resources as they are themselves essential resources.

The outline of a non-reductive view of the resources needed for media literacy would, however, be incomplete if we did draw attention to a final element related to the vision of the role of media in society and culture. In fact, this element underlines a larger issue in media education development. As pointed out in 1989 by the influential Canadian work «Media Literacy Resource Guide», the resources have little meaning if they do not take into account the underlying rationale. This includes the recognition that the media construct social reality, but at the same time, they are themselves a reality socially constructed. Media output contains ideologies and worldviews that are more often invisible to the naked eye; what they explicitly or implicitly convey influences social and political life. This does not mean that those who receive the messages they send necessarily do so in a passive way. This already occurred in the era of mainstream media, and it happens now but on a larger scale in the age of interactive and digital media.

2. From research to the field: creating resources for media literacy

2.1. Starting points: the evidence from research

On 16 December 2008, a resolution on «Media Literacy in a Digital World» passed by the European Parliament pointed out that «acquiring media literacy begins in the home with learning how to select from the media services available», stressing «the importance of media education for parents, who play a decisive role in the development of children's media-use habits». This recommendation, and the research along these lines, has highlighted the importance of the

family context for media reception. Several researchers have stressed the value of the family in mediating children's relationship with the media (Strasburger & al., 2009; Lemish, 2008; Pinto, 2005; Pereira, 1999). In fact, one of the main discoveries of research on audiences is the increasing recognition of the importance of reception analysis and consumer context: the family environment. The amount of time that young people devote to media frequently gives rise to concern among parents who do not always possess the necessary tools to analyse and understand this reality and act upon it. Several studies developed in different

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countries show the significance of direct interaction between children and adults. If parents discuss, comment on and help children interpret media content, they can help their children understand their messages.

Media play a significant role in children's socialization process; the media are a unique source of learning and contact with the world. Several authors (Strasburger & al., 2009; Pereira, 1999; St. Peters & al., 1991) defend the idea that parents can influence the way children use the media and the learning process that develops from these experiences.

As a result, parents should be sensitized to this important task and have access to resources that inform them on how to deal with children's media experiences. In Portugal, the lack of materials and guidelines has conditioned the implementation of media education in contexts such as school or family. This led us to design a project, having taken the results from research as a starting point, the various experiences from training and considering the gap between theory and practice identified by research and training, whose main aim was to produce materials to support media

literacy in the family. This project, entitled «Media Education in Booklets», was awarded the 2009 Evens Foundation Prize in Media Education by this Belgian organization, which encouraged us to take this opportunity to bridge the gap identified by the research – the need for resources in media education (Figure 1).

2.2. The «Media Education in Booklets» project: main objectives

Based on the assumptions presented above, the main aims of the project were: 1) to provide materials to help parents and teachers to mediate young people's experiences with media; 2) to empower educational agents (parents, teachers, socio-cultural facilitators) and children to become critical and demanding media consumers; 3) to contribute to the improvement of the level of consumer/ citizen information (considering that the quality of the media also depends on the critical awareness of their public).

2.3. Themes and target audience

To put these ideas into action, the team conceived three booklets written in a simple verbal and an attractive visual language, which would be easy to read and carry. The entire project was guided by media education objectives in the sense given it by Rivoltella (2007: 23): «media education, or rather, citizenship education, should provide especially meta-reflective activities, promoting citizens' capacity of self-analysis that contributes to the development of the awareness of what they are doing».

Each of the three publications focused on a specific medium: TV, videogames and the Internet and social networks. The choice of these media was due

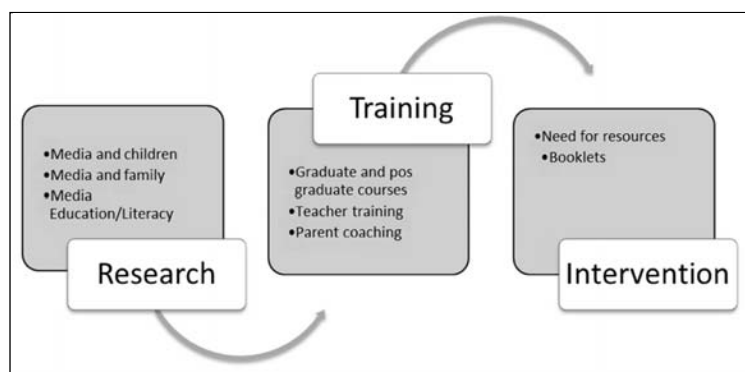


Figure 1. From research to the field: the need for resources.

to their importance in the lives of young people.

The TV booklet is organized in three parts (Figure 2): the first part reflects TV habits and clarifies some common sense ideas about the role of TV in children's lives; part two is mostly dedicated to the mediation process, trying to sensitize the parents to this important task; the third part proposes some activities to enrich the experience of watching television. The figure below describes these three parts of this booklet in greater detail.

The second booklet, entitled «Videogames: Stepping up to the Next Level» was also divided into three parts, as shown in Figure 3. The first part begins with a brief history of videogames, types of games, and identification of the videogame research areas: design, programming, psychology, education. The second part reflects children's and young people's practices and perspectives on videogames. It also focuses on the dangers and potential of videogames identified by the research and society. The third part presents strategies for parental mediation. It also focuses on the place of videogames in school and the role of media education.

The Internet and Social Networks booklet centers on topics like the social networks most used by young people; new forms of communication and their importance

in the process of young people's socialization; and the significance of contexts (cultural, social) in the access to and sharing of information. Another topic is dedicated to a brief discussion of the possible consequences of excessive habitual use and the risk of social isolation. The booklet ends with a

Kids and TV: Watching Wisely	
1st part	Reflecting and clarifying
	<ul style="list-style-type: none"> • TV viewing by families and children • The importance of TV and other media in children's lives • How TV influences children's socialization process • The role and meaning of TV in each family
2nd part	(Re)acting
	<ul style="list-style-type: none"> • TV mediation process: how parents and other adults can mediate TV with children • The importance of mediation in children's TV viewing habits • The contribution of parental mediation for quality TV experience
3rd part	Proposing activities
	<ul style="list-style-type: none"> • Writing a diary: what happens during a week (with or without TV) • Topics for program analysis with children: fictional and informative programs • How to complain or to praise: information about TV networks and TV programs: postal and web addresses

Figure 2. Main parts of the TV booklet.

Videogames: Stepping up to the Next Level	
1st part:	Videogame history and its contribution to technological development
	<ul style="list-style-type: none"> • Brief history of videogames • Contributions to their development • Types of games • Videogame research areas: design, programming, psychology, education
2nd part:	Videogames as a cultural element: between violence and learning
	<ul style="list-style-type: none"> • Connection between children and young people with videogames • Children's practices and perspectives on videogames • Dangers and potential identified by the research and society
3rd part:	Mediation: videogames in school and in the family
	<ul style="list-style-type: none"> • Strategies for parental mediation • The place of videogames in school • The role of media education

Figure 3. Main parts of the Videogames booklet.

reference to the need for digital literacy and the importance of family and peer mediation, considering social networks as potential means of participation and citizenship. Figure 4 presents the main parts of this booklet.

The booklets are aimed at a wide age range. The television booklet is primarily for six-year-old school goers; the videogames booklet focuses on 8-10-year-olds, and the Internet and Social Networks is aimed at children of 12 and older. In terms of reading and use, the booklets were designed for parents, teachers and, of course, children, for the reasons explained below.

2.4. Conception and graphic design

The procedure for setting up each of the publications was identical. The texts were written based on data and information from national and international research. The first step was to gather in this information. The authors were concerned to avoid a moralistic perspective or to provide a ready-to-use set of strategies. The main aim was to provide information based on the evidence from the research and make suggestions for action in order to encourage readers by appealing to their experience as consumers within the particularities of their contexts, whether family, school, etc. As the content of the booklets is predominantly based on the relationship of young people with media, the aim was for their voices to be heard throughout these publications, and the best way to do this was through drawings

and texts produced by the children themselves whose ages ranged from 6 to 15. This material was collected at schools and the team subsequently selected drawings and texts for publication, according to the topics of the booklets.

The project involved about 200 students from 10 schools in northern Portugal. As already mentioned, students participated by presenting drawings and texts which enriched the publications with their perceptions. The involvement of these schools in the project gave the children an opportunity to learn and share experiences of media consumption habits and patterns of usage. Furthermore, in doing so, children and young people were not considered to be mere consumers but producers and participants.

With this material and data collected from the literature, the authors were able to produce the content of the booklets, with the collaboration of a designer who created three characters for the publications, thereby lending continuity to the three booklets and framing the material produced by the children².

Before publication, the texts were sent to parents, teachers and/or experts in the field to check the clarity of language and suggestions for corrections or amendments. These comments were a valuable contribution to the final review and also provided an initial sounding-out of public acceptance of the booklets.

Internet and Social Networks: Caught up in the Web	
1st part:	Social network concept, users and impact:
	<ul style="list-style-type: none"> • What are social networks? • Profile of social network users • The impact of digital media in society • Technological evolution • Just a trend or new ways to communicate?
2nd part:	Learning to use social networks:
	<ul style="list-style-type: none"> • Privacy and identity: data sharing and security • Research and use of information and media content • Fighting excess, addiction, alienation • Participation and citizenship
3rd part:	Suggestions for families, schools and teachers:
	<ul style="list-style-type: none"> • Strategies for mediation at home and school

Figure 4. Main parts of the Internet and Social Networks booklet.

Finally, the booklets were published with different launch date, and disseminated throughout the country.

The main methodological steps of this process are reported in Figure 5.

2.5. Dissemination of the project

The way in which the project was disseminated and the booklets were distributed throughout Portugal was carefully considered beforehand. The team's intention, and the initial commitment given to the Foundation, was to distribute the booklets free of charge via a mass circulation national newspaper. However, difficulties arising from the economic crisis in the country hampered this goal, but were partly overcome by means of a partnership with a regional newspaper. Thus, the booklets were distributed by a newspaper that covers the city of Braga³ and the surrounding area, with a circulation of around 9,000 copies. The team's concern was that the booklets reached the largest number of people across various social classes and geographical areas.

This distribution strategy was accompanied by public meetings which the team held to launch the booklets. The three booklets were published on dates with a special meaning: the booklet about television was launched at a bookshop that celebrated the 20th anniversary of the Convention on the Rights of Children (November 20th, 2009); the videogames booklet was presented at the same bookshop coinciding with International Children's Day (June 1st, 2010); the Internet and Social Networking booklet was presented at a seminar on «Digital Literacy and Social Networks», which was attended by about 200 people. These sessions ensured significant exposure for the project and aroused much interest among the population, particularly in the media.

The project and booklets were also presented at national and international conferences, at schools and in public libraries. In fact, libraries have become important partners in the distribution of the booklets, and partnerships with civic associations and schools have also been established.

The team also foresaw that the project could reach beyond the

Portuguese border, and so the booklets were translated into English, which enabled their distribution at international conferences and encounters with people from the communication and education sciences. The idea was to make the project as widely known as possible, to raise awareness in researchers from different knowledge areas of the importance of media literacy and of providing resources to make this scientific knowledge more readily available to society.

In the first quarter of 2012 the booklets were made available online in Portuguese and English (www.lasics.uminho.pt/edumedia/?lang=en), thus reaching out to an even greater target audience.

3. Final remarks

In this project, media literacy was understood «in a context of empowerment and human rights» (Livingstone, 2011: 417), namely children's rights to participate, express their opinions and be informed, as advocated by the Convention on the Rights of Children. The core idea was to provide resources that empower citizens, young people and adults to deal critically with media, either traditional or new. As Livingstone stated, «it is certain that most cultures hope children will be critical media consumers, though not all provide, or can provide, the educational resources to enable this»

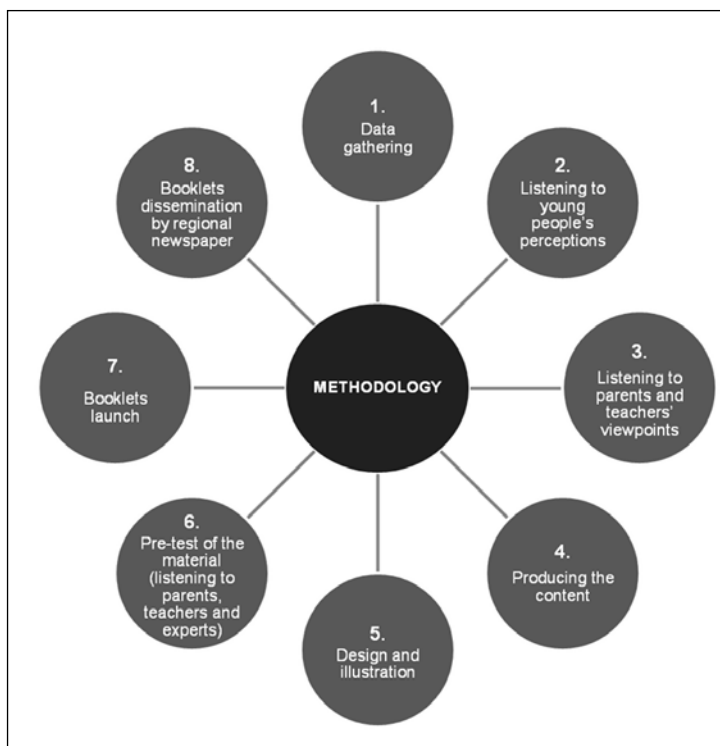


Figure 5. The project methodology.

(Livingstone, 2011: 417). The choice of the booklet as the format for the creation of these resources in an age of digital media was intentional. The aim was to create a resource accessible to all, easy to use and carry, whether at home, at school, or anywhere. The visual language was intended to capture the attention of children, arousing their curiosity, imagination and a desire to read it, by themselves or with their parents or teachers. We also wanted these resources to involve digitally info-excluded people, giving them the opportunity to reflect on children's experiences with the media.

A less positive or underachieved dimension of the project was the difficulty in following-up on the reception and use of the booklets within families, schools and libraries. In some way this was due to the fact that the team was not able to monitor the distribution of the booklets once distributed further than expected. Some testimonies received were sent in voluntarily and spontaneously by readers, which may explain their extremely positive tone. We received feedback from many parents and teachers who acknowledged the importance and need for such resources, as shown by the extracts transcribed below. The scarcity of media literacy resources in Portugal may also explain the booklets' positive reception. In future research on media education contexts, experiences and resources, the team expects to evaluate more rigorously the impact of this kind of material on building media awareness.

- I liked the text, I found it accessible and clear. It is not a moralistic text (mother).
- Everything in this booklet is relevant (mother).
- The document in general seems very well done; it is methodical in the presentation and in the recommendations, ending with concrete information on legislation and contacts (father).
- This work is very important and useful for parents. More than this, it is urgently needed! (parents).
- The contents seem to me to have relevant and useful information, with practical recommendations that are possible to achieve (father).
- It is clear and accessible, and can be helpful to

parents who worry about these matters, or even a warning to those who do not care (father).

- This document is very important for educators, works well as an orientation guide! I hope this text is widely publicised (mother).

- I considered it extremely important, especially because in daily life we don't think much about these issues and a booklet is a way to check our responsibilities as educators, not just in relation to television but also for greater interaction with our children (mother).

The team also had positive feedback from experts and researchers, but the project needs to receive a broader range of opinion in order to make a more profound evaluation of the project's impact. It would be

It is important to provide resources that give citizens the opportunity to think about their relationship with the media, which allow them to think about the importance and meaning of the media in their everyday lives, particularly in their children's lives. It is with this perspective that the team hopes to continue producing materials that contribute to the promotion of media education, in particular, enlarging the collection of booklets to take in other media and topics, including advertising, mobile phones and citizen's participation in the media, among others.

invaluable to monitor the use of the booklets by parents, teachers and children, and in contexts such as families and schools. Nevertheless, conclusions from other studies that evaluate practices in schools after the distribution of media material kits present favorable results. For instance, Susanne Krucsay (2007: 118), Director of the Department of Media Pedagogy and of Production Services at the Federal Ministry of Education, Science and Culture in Austria, stated that studies conducted after the distribution of support materials in media education for teachers show that «there is a significant positive correlation between the frequency of media use in education in school practices with relevant material».

The added value of this project is not only the products but also the process that took place to produce

them. The involvement of teachers at 10 schools, collaboration with more than 200 children, and the work and discussion enhanced by the activities proposed by the team were in themselves an opportunity for media education.

Despite the constraints of the economic crisis and the consequent difficulty in involving more social actors, namely the media, in a wider distribution and dissemination of the booklets, the presentations to students, parents, teachers and librarians enabled us to sensitize these social agents to the importance of media literacy. The concern with the content and the need for the information to be based on research findings, written in plain language and avoiding a moralistic tone was, from the team's perspective, positively valued by the recipients.

The design and implementation of resources for media education if based on a humanistic perspective (Pérez Tornero & Varis, 2010), as advocated in the introduction to this paper, values not only the product but also the process, and takes into account the potential of individuals, their voices, opinions and sensitivity. This was the perspective applied in this project, in which the resources do not come from outside, or from a supposedly enlightened source with the consequent prescription for action to be taken. They are, rather, moments in a process that is intrinsic to the action, even when they come from experiences spread over a broad geographical area. Hence, the advantages of the production of resources that come from action and research.

As Scheuer (2009: 15) states, «Currently, citizens (individuals of all ages and gender) need to develop analytical skills that enable them to better understand the emotional and intellectual world of symbols produced by the new media». Therefore, it is important to provide resources that give citizens the opportunity to think about their relationship with the media, which allow them to think about the importance and meaning of the media in their everyday lives, particularly in their children's lives. It is with this perspective that the team hopes to continue producing materials that contribute to the promotion of media education, in particular, enlarging the collection of booklets to take in other media and topics, including advertising, mobile phones and citizen's participation in the media, among others.

As the Portuguese Nobel Prize winner José Saramago said in his book «O Conto da Ilha Desconhecida» (The Tale of the Unknown Island) (2010), «it is necessary to leave the island to see the island, we do not see it unless we leave it». Applying this notion to the relationship with the media, it is important to

look at the media and media experiences from outside in order to understand them.

In a final note we wish to underline how important the support and funding from the Evens Foundation was for the implementation of this project.

Notes

¹ On this particular point, we have incorporated ideas from the study (Pinto & al., 2011).

² Some of the material collected was analyzed more deeply for other studies with different purposes. For instance, the texts about videogames were submitted to a systematic content analysis, which allows the researchers to further understand the perspectives and perceptions of young people on the phenomena of electronic games. For the booklet on Internet and Social Networks, the team did a survey of teachers' perspectives on this issue by questionnaire. This work was presented at the «Literacy, Media and Citizenship» congress, held in Braga in March 2011, and was published in the proceedings of the congress (www.lasics.uminho.pt/QJS/index.php/lmc/article/viewFile/516/489).

³ Braga is located in northern Portugal, has about 180,000 inhabitants and is considered one of the most dynamic cities in the country. The University of Minho has its headquarters in this city.

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Critical Reading of Media: A Methodological Proposal

Lectura crítica de medios: una propuesta metodológica

ABSTRACT

This work analyzes some aspects on which the development of critical thinking is based starting with the contributions of critical theory to the educommunicative perspective, as a bedrock for reflection on the media. This work reviews the characteristics of the critical subject and differentiates between critical reading and critical thinking. The former works as an analytic strategy that searches the re-reading of texts or audiovisual messages to identify categories attached to discussion and interpretation; the latter highlights ways to learn to think autonomously which leads to the proposal of interpretation strategies that target creative thinking. The objective of this article is to present orientations coming from Social Communication as an academic discipline that sustain Critical Readings conceived as educommunicative strategies. The methodology used to develop this study is the review of documents and content analysis. The result is a guide that proposes actions for critical media readings in the classroom. The conclusion is that the promotion of a critical attitude involves identifying the political personality of the cultural industry and the communicational process; it means constant questioning of the transparency of media messages, with the aim of creating independent, inquisitive and creative citizens.

RESUMEN

El presente trabajo analiza algunos aspectos sobre los que se sustenta el desarrollo del pensamiento crítico. Se parte de los aportes que la Teoría Crítica brinda a la perspectiva educomunicativa, como base para la reflexión en torno a los medios. Este trabajo se justifica en la medida en que se reflexiona sobre algunas dimensiones del sujeto crítico, y que diferencia entre lectura crítica y pensamiento crítico. La primera funciona como estrategia de tipo analítico que busca la re-lectura de los textos o los mensajes audiovisuales, con el fin de identificar categorías sujetas a discusión e interpretación. El segundo apunta a una propuesta de aprender a pensar de manera autónoma, lo que conlleva el proponer estrategias de interpretación que apunten al pensamiento creativo. El objetivo del presente artículo es mostrar algunas orientaciones que, desde la comunicación social como disciplina, sustentan a las lecturas críticas concebidas como estrategias educomunicativas. La metodología utilizada en este estudio es la revisión documental y el análisis de contenido. El resultado final es una guía en la que se proponen acciones para realizar lecturas críticas de medios en el aula. Se concluye que promover la actitud crítica, implica identificar el carácter político de la industria cultural y del proceso comunicacional; supone sospechar de la transparencia de los mensajes mediáticos y apunta a conformar un ciudadano independiente, cuestionador y creativo.

KEYWORDS / PALABRAS CLAVE

Educommunication, educational strategies, critical reading, critical perception, critical thought.
Educomunicación, estrategias didácticas, lectura crítica, percepción crítica, pensamiento crítico.

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«What matters here, rather than teach things and transmit content, is that the individual learns to learn; to be capable of thinking for himself, to overcome verifications merely empirical and immediate findings of facts that surround it (naive consciousness) and develop its own capacity to reduce, to relate, elaborate synthesis (critical consciousness)» (Kaplún, 1998: 51).

1. Introit: An approach to critical theory

The first 30 years of the 20th century were dominated by the print media and their capacity to generate opinion, as well as radio and cinema, instruments of disclosure of far-reaching and significant emotional impact that rectify the problems of access to information imposed mainly by legal culture. In this context, critical theory proposes new ways of approaching reality that differ from those used in other countries at that time, in order to produce through transdisciplinarity as a way of thought and action the tools necessary to respond to the equitable transformation of the world. The initial steps in critical communication theory were taken at the Frankfurt School, a name given to the group of researchers led by Max Horkheimer that generated studies in various fields of knowledge (aesthetics, arts, anthropology, sociology and philosophy), from the Institute for Social Research of the University of Frankfurt¹, and comprised the so-called critical paradigm of communication.

Basically the Frankfurt outlook reacts to the leadership of research in American communication, with its functionalist character, whereby one of the functions of the media is to provide regulation and social equilibrium. The aspect that was strongly challenged by the Frankfurt school referred to the use of the media as instruments of political control and commercial domination.

The set of studies arising from the so-called North American school² fell within a double slope. The first were those that form part of the empirical and sociological paradigm of structural-functionalism and the Mathematical Theory of Information³. The second are the sociological studies from the Chicago school.

US investigations endorsed the media effect approach, represented chiefly by the Magic Bullet Theory or Needle Hypodermic⁴. This theory is based on the idea of the omnipotence of the media to influence an audience considered passive and therefore easily manipulable, and is based on studies by Ivan Pavlov and Burrhus Frederic Skinner's Social Behaviorism. The increased activity of the North American school is shown in «Work on Political Propaganda» funded by the Institute for Propaganda

Analysis, as well as the effects of radio and cinema on morality and culture, and studies on hearings linked essentially to advertising. The effects become the star research theme. «All the other elements of the communication process are considered as soon as they can contribute to improving the impact: the contents are analyzed to subsequently design more effective messages and the study of recipients interested in knowing how to influence attitudes and motivations» (Igartúa & Humanes, 2004: 113)

It was to identify how efficiently audiences are influenced in order to get at certain answers and shape public opinion that the studies generated by Harold Lasswell, especially the so-called «5 Ws» formula (Who says? What is said? What are the effects...?), were decisive for the analysis of the communication process., which considered control/property/issue, the content (technological channels, audiences and effects); and this is research line that is still in force.

In the research context, we recall the propaganda campaigns of the Second World War that sought to convince the population of the benefits they could obtain in the event of war, such as well as buying more bonds (Igartúa & Humanes, 2004). This is a clear example of how government sought to influence the audience with the aspiration of obtaining results through the use of strategies of persuasion that years later were still being used in advertising and politics, without ignoring other areas.

The critical theorists of the Frankfurt School object to the US researchers' epistemological principles, believing that the data that yield standardized surveys and other tools do not report relevant interpretations of the complex reality. The research should not be an instrument for achieving commercial purposes but a factor to ensure a society that is more just and balanced in all aspects. In this regard, Theodore Adorno writes: «It seems clear that civil society needs to go on enriching itself in critical terms. The attitude of the cultural critic, thanks to the difference or distance between them and evil and disorder, lets you override theoretically, although the critique often fails for being remote from them. What makes the critical attitude work is the articulation of the difference or distance within the same cultural device which aimed to overcome, and you need precisely that distance to take in culture» (Adorno, in Lucas & al., 2003: 187).

The Frankfurt School analyzes the cultural crisis of industrial societies from the Marxist episteme, and their topics of interest include focusing on political economy, the labor movement and the Marxist philosophy. The main postulate of the school is based on

so-called «negativity» as the critical impulse that moves the Enlightenment, emphasizing the critical aspect that motivates change and social transformation. This, therefore, ensures the exercise of a critical dialectic: a method of seeking the truth from the dialogue, in which a concept is confronted with its opposite (thesis and antithesis), to then achieve the synthesis.

Part of the investigative work of this school is psycho-sociological, the integration of the individual in society and the cultural impact of commercial life. The funny thing is that some of these studies, conducted by Max Horkheimer and Theodore Adorno, were made under the aegis of North American capitalists, as the following quote testifies: «In 1937 (Lazarfeld) instructs Adorno in his research as part of the Princeton Radio Research Project (Columbia University) into music and its effect through radio broadcasting. It gives rise to the publication in 1938 of an article on the fetishistic nature of music and the regression of hearing. The public are subject to the criteria of commercial radio and the interests of record companies, individual musical taste regresses to infantilism. These ideas contradicted the interests of the industry (who financed the research), which sees in Adorno's ideas a certain ideological criticism» (Igartúa & Humanes, 2004: 121).

Following these studies, Horkheimer and Adorno coined the term «Cultural Industry» (1944; 1947)⁵ to refer to all symbolic production that standardizes mass culture, provoking social disequilibrium.

Adorno and Horkheimer sustain that media production (films, radio and print media) aims to ideologize and homogenize content and preferences to cultivate tastes and necessities, and undermine the audience's ability to discern. This kind of cultural product was meant to be consumed quickly in a distracted way, limiting mental discernment and breeding domination patterns.

One of the fundamental aspects of this theoretical posture is to promote a critical attitude that deals with media culture and influences scientific production, in consonance with the Marxist proposal for the reorga-

nization of society. Much of the Frankfurt's School work is developed between World War I and II, which justifies the sense of its sociopolitical orientation.

According to the theories of the Frankfurt School, the cultural industry creates an economic system that is concentrated, identical and standardized, and consolidated by the so-called «technical rationality». This rationality leads to the manipulation and obliteration of the citizen's critical reflection that negotiates the cultural industry repertoires.

Igartúa and Humanes (2004) say that in technocratic societies, what is rational (formal rationality:

To install or promote a critical attitude in the case of educommunication requires identifying the political approach of the cultural industry and the communication process; this requires constant questioning of the transparency of media messages and proposing the creation/ formation of the independent citizen who is inquisitive and creative. It is no coincidence that many educommunicative experiences in Latin America, especially those described by Mario Kaplun, were at one time or another performed clandestinely due to the military dictatorships prior to the 1980s.

adaptation of the media to the ends) dominates reason (substantive rationality: actions are performed taking into account a series of values). At the same time technical rationality offers more possibilities for control and creates a one-dimensional society (Marcuse, 1993) in which individuals are considered defenseless. Critical reflection thus transforms itself into the main tool used to survive market and mass culture impositions. This is precisely its main communicational strategy.

2. Critical nature and educommunication

It could be said that critical theory provides educommunication with perspectives, bases on which to reflect on the media, which materialize in a critical reading pattern. These are conceived as methodological tools of the critical subject dimension, according to the

categorization formulated by José Martínez de Toda (1998; 2002). Critical subjects question the representation of the media that confront their culture, values and meaning through cognitive strategies of critical thinking.

For the critical subject, «the media hide ideologies and try to impose them. The subject must go from being naïve towards the media and their myths, to being critical» (Martínez de Toda, 2002: 330). Critical reading and the exercise of deliberative thinking encourage demanding and autonomous reflection on

education ultimately aim to develop Critical Thinking: «All the programs share the same relevant objectives which consist of developing the student's critical thinking. Likewise this common objective leads us to consider diverse aspects that belong to this same study field such as experiences that appear to be different from each other, both in as much as what the object of study refers to and in its approach to teaching... according to this perspective, any research on media deserves to be published as long as it contributes to the development of critical thinking... to achieve develop-

ment in a coherent and autonomous way, media education must offer a clear and precise definition of the concept of critical thinking and suggest specific ways for making this concept operational in appropriate teaching patterns for different audiences and different school contexts» (paragraph 8 and following).

At first sight, it appears like any Educommunication action must include the promotion of Critical Thinking and the activation of critical readings. But

The media programs mislead the critical spirit and the acquisition of knowledge. They propose that the student becomes implicitly more critical whenever he acquires the knowledge proposed by the program. But a fundamental question remains unanswered: what do we understand by critical thinking?

the media. There are diverse modalities of media critical reading that have generated a series of controversies described by Buckingham (2005) and adapted to the Latin-American context:

- 1) It is believed that the only critic is oneself.
- 2) Only the left see the critic as an entity that is proposed and executed.
- 3) The emphasis is on aspects of ideology, not critical autonomy.

Consider «everything that goes against the system and, evidently not just revolutionary democrats such as Freire are against the system, but also neo-Nazis like Haider» (Aubert & al., 2004: 2)⁶.

In the Latin-American case, the relation between the different postures linked to Media Critical Readings has already been pointed out by Valderrama (2000). The author outlines what are considered to be, in general lines, the principal parameters of critical readings: 1) To unravel the ideological content of the messages; 2) To create mentally active habits; 3) To enable receptors to discover the elements that form the structure of the messages; 4) To teach how to decipher ideologies, guided by semiotic orientations, used as theoretical methodological referents.

Piette affirms that the different practices in media

this is not always the case; a certain media criticism is practiced that only seeks to repeat determined and pre-established points of view, avoiding those that might be different, which is inconsistent with the proposal of critical autonomy proffered by Masterman (1993). We consider that media reading that lacks reflective thinking is an incomplete actions.

Kurland asserts that critical reading is an analytical strategy for re-reading texts or audiovisual messages with the purpose of identifying categories tied to discussion and interpretation, according to established guidelines. Critical thinking involves reflection on discoveries arising from critical reading: to value not only the results but also to propose strategies for reflection and, above all, to re-think the possibilities for change and transformation that lead to creative thinking.

Critical reading is based on the cultural competence of the reader, as he/she identifies/understands the message, relevant aspects of the text without them interfering with the reader's previous knowledge or points of view. It is a work based on the content just as they appear. It is common for readings that aim to be critical to be wrongly done, due to:

- 1) Absence/ lack of text, meaning there are elements that are missing from the text.

2) The critic is aware that the texts lack certain aspects related to his/her wishes and needs, referring to what the reader thinks should exist in the text.

3) The reader confirms that there are ideas in the text that can only render limited and forced interpretations (Kurland, 2003).

Critical thinking refers to determined ideas and kinds of reflection, including metacognition, as a mechanism that leads to thinking about what is being thought, and is therefore an auto-reflective process. Critical thinking develops how to learn to think, to do so in an autonomous way without sticking to predetermined or restricted approaches.

Although critical reading has its specificities in the educational field it varies but inserts itself into the educommunicative field, as expressed by Piette (1996): «The concept of critical thinking is far from having a clear definition; for the researchers of this study field... most of the time the concept is not even perceived in a conflictive way; the researchers consider the development of Critical Thinking as a «natural» result of the teaching that they develop in their programs. In this way, the rise of Critical Thinking would then be a «normal» and an «unavoidable» consequence of the acquisition of knowledge about the media, transmitted thanks to the development of content in their media programs. In this way, the student's critical thinking develops, needing no pedagogical intervention. Summarizing, the media programs mislead the critical spirit and the acquisition of knowledge. They propose that the student becomes implicitly more critical whenever he acquires the knowledge proposed by the program. But a fundamental question remains unanswered: what do we understand by critical thinking?» (Piette, 1996: 11 and following)

A clear example that verifies this reflection can be found in the Venezuelan context, in the recently promulgated Education Organic Law (2009) which proposes an integration of work with media and the education system, to expand critical thinking by means of «Training Units». According to the 9th chapter of the law, «the public communication media, as a public service, are essential instruments for the development of the educational process and, as such, must perform informative, instructional and recreational functions that contribute to the creation of values and principles established in the Republic's Constitution and the present law. With knowledge, the development of critical thinking and attitudes to encourage coexistence among citizens, territoriality and nationality... The sub-system of the education system will incorporate «training units» to contribute to the knowledge, comprehension

and use of social communication media content and critical analysis of the same. The law and regulations will also regulate propaganda in defense of the mental and physical health of the population» (LOE, 2009: 8).

July 2011 saw the organization in the capital, Caracas, of so-called student brigades of the communication war command responsible for spreading messages of support for the Government communications policy in an «underground» style. With this action, the principles of otherness proposed by the Guerrilla of Communication⁷ ceased to make sense along with the democratic practices of media readings.

Although all this is set in the Venezuelan context, instruction on and promotion of criticism have changed with the transformations of current society. It is increasingly easier to observe how actions research in other areas of the conflict of knowledge helps to avoid sterile criticism which in itself involves more creative and elaborated strategies.

To install or promote a critical attitude in the case of educommunication requires identifying the political approach of the cultural industry and the communication process; this requires constant questioning of the transparency of media messages and proposing the creation/ formation of the independent citizen who is inquisitive and creative. It is no coincidence that many educommunicative experiences in Latin America, especially those described by Mario Kaplun, were at one time or another performed clandestinely due to the military dictatorships prior to the 1980s.

Critical reading in educommunication reveals hidden messages behind the given messages, in which orders are dictated constantly, and prescriptions related to values, and in Venezuelan case proscriptions, given via the Public Media National System. An example is the use of stereotypes: descriptions of individual and/or social groups related to the social order. However from the media praxis, the audiovisual in particular, stereotypes have been simplified to produce standardized visions, which in most cases are biased outlines of gender, race, social condition, religion, political stance and sexual preferences.

Critical readings identify communication strategies that media present to the audience in hidden messages (effects); on the other hand, they recognize that behind the perceived message there is a market logic in the media industry that favors certain ideological positions (criticality); or, as is the case in our country, of certain political projects to the detriment of a critical and autonomous reading of media.

The media critic must satisfy three validity criteria:

1) Being objective, avoiding ideological proposals; 2) Taking into account the social, political and cultural influence that unnecessarily embraces the media; 3) The media must be settled in their context, environment, with values, demands and aspirations (Jansen, in Lucas & al, 2003: 191). We add references on critical readings from the literary discipline and which can enrich the interdisciplinary educommunicative approach. Wolton (2000) indicates that critical readings require the reader possesses a series of intellectual skills that involve reading, decoding, analysis, perspective, expression and communication.

3. Critical reading of media in the classroom

Some educommunicative practices apply critical readings. However, it is uncommon to find procedures that make them explicit, so how should this kind of reading be performed? We present a useful procedure which is more a methodology than a recipe for carrying out media critical readings in the classroom, which can be adapted to the group's needs and the requirements of the subject and/or the study level. This can be applied in any formal teaching/ learning environment:

1) Select the media text or texts; this can be done by the teacher or the group before the activity. Visualize it (reading or listening to it, according to the case) as a starting point.

2) Identify values and views that the group possesses in terms of the media text. Consider emotional affinities: did you like it? What did you dislike? What aroused their curiosity? What were they indifferent to? Include: usage, habits and tastes regarding the media text. This step is the recognition of the characteristics they have as consumers of media, with habits, tastes and preferences.

3) Study the formal elements of the text: the deconstruction of the aspects that shape and link with the language and grammar in each media. In the case of television, for example, use of shots and angles, camera movements or composition. Include: description of a television genre, the structure of a magazine or a newscast.

4) Interpret the relationships that the issuer suggests by the deliberate construction of the message, taking into consideration formal aspects identified in the previous section; these are evidence of analysis. Specify the denotative, primary meaning (Saussure, 2005), according to related culture. In the case of audiovisual language, for example, it is easy to interpret a shot such as a «low shot» angle that demonstrates the superiority of the object represented.

5) Select a specific theme for discussion, as a motivational strategy. This leads to work with specific general problems and not certain individual viewpoints.

6) Contextualize the message or analyzed text, considering that it may occur in various formats. Nowadays, this involves technological intervention, conditioned interpretations and relationships established with audiovisual speech. Contextualize is to locate the texts in their socio-cultural context, i.e. it implies reflection on the references that help us to interpret /understand the issuer/author of the message, as well as the diegetic location (spatial and temporal) of the media text (when did it happen? where was it drawn up?).

7) Evaluate the text from the identification of the source: who is the issuer? (origin of the text). This allows us to evaluate the degree of confidence it has with respect to institutional mediation to infer the possible interests of the issuer. The issuer can be an artist, as in the case of a short film, a company that responds to the logic of the entertainment industry, as with soap operas, a public institution or health prevention campaign.

8) Identify the characteristics of the content from the genre, format and media from which it arises. Students should be encouraged to discriminate between facts, inferences and opinions, for example, in news programs or in the print media. This will allow them to understand the use of the language and grammar of media, its linkage with the theme and developed gender. If we look at a magazine we are unlikely to see sequencing with a descriptive intent or details of a level of usage that emphasize specific aspects of what is represented, because the logic of the discourse points to another type of plane, showing the scene of representation and dynamism, among other technical and semiotic aspects.

9) Inventory concepts and definitions that serve to establish relationships between them; from experiences and prior knowledge, depending on the review of its influence from the context in which it is immersed. It basically works from dialogue, discussion and joint account agreements. Here different social mediation and knowledge in reflective action are at play, from the constructivist perspective.

10) Discover the present in the text (Saussure, 2005), connotations, i.e. identify the subjective meanings, ambiguities and multiplicity of interpretations it offers. It is essential to assess the points of view of each reader/interpreter and above all, constructions from their references. This step can include the investigative

or intentional analysis of the author/sender of the message; recognize the means and ends used to build the message; make assumptions and conjectures that allow the reader to anticipate consequences. This procedure relates to the process of questioning.

11) With the information obtained so far, it is possible to build «premises of interpretation», which should be argued over and, above all, shared/negotiated with the group that participates in the process of critical reading. These premises, in turn, are directly linked to the topics that have been proposed to guide the discussion.

12) Second level of contextualization. That is, analysis of the aspects related to the industry/field in which the text occurs. A valuable exercise can be to take the news from the local press to analyze how information is presented: what are the business or political groups involved; the contradictions and overlap; the power relations that are referred to directly or indirectly, relations with society; the treatment given to the same information in various media, among other aspects.

13) Motivate rereadings of the media discourse, offer views on: what is added to the text to improve it? What can be suppressed? What would it change? What other issues/problems can be worked from the analysis? What would be changed in the program? Propose new readings or problems that can be treated while dealing with the same analyzed text.

14) Reflect on what has been analyzed, what they learned and understood. How did the exercise go? What could be changed or improved? How were the results obtained? What is acceptable in the process of interpretation? The student tries to explain and understand himself/herself: What is thought? How do you think? How do we think the student thinks? (Castellano, 2007).

These exercises are a starting point for the development of educative experiences, taking leave of tastes, exposition and preferences that come from the «Show-business Culture».

Notes

¹ Created by Felix Weil, its objectives included the study of social

life in its entirety, on the basis of the economy, the forms of power and ideology. With the advent of Nazism, the institute was forced to close and its main researchers emigrated to Switzerland, France and the United States.

² Even if the so-called American school appears as a trend of organic research or «unitary system of thought», within it there are varieties and dimensions of scattered studies with various theoretical lines (McQuail, in Lucas & al., 2003).

³ Proposed by Claude E. Shannon, «A Mathematical Theory of Communication» (1948), provides a theoretical basis of communication technology and poses key concerns in relation to two of the components of the communication process: the media and the message.

⁴ Term coined by Harold Lasswell in «Propaganda Techniques in the World War» (1927), in which he reflects on the impact (effects) of the media on public opinion.

Critical readings identify communication strategies that media present to the audience in hidden messages (effects); on the other hand, they recognize that behind the perceived message there is a market logic in the media industry that favors certain ideological positions (criticality); or, as is the case in our country, of certain political projects to the detriment of a critical and autonomous reading of media.

⁵ First date corresponds to the writing of the text and the second to the year of publication.

⁶ The quote refers to Jörg Haider (1950-2008), leader of the Party of the Right «Alliance for the future of Austria» (BZÖ). For his actions, Haider was listed as populist, xenophobic and filonazi.

⁷ Communication guerrilla, a term coined in 1997 by group a.f.r.i.-c.a., of European origin in the publication *Handbuch der Kommunikationsguerilla* (Blisset and Brünzels). The work is based on codes of reworking the semantics and modification of media messages, which are supported in semiotics, as well as the following technical actions: estrangement; Collage and Assembly; Misrepresentation; Over-identification; Fake and Subversive Affirmation.

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Genre and Age in the Reception of Television Fiction

Género y edad en la recepción de la ficción televisiva

ABSTRACT

This article summarizes the main results of an investigation that is part of a project regarding the construction of youth and gender identity in television fiction. The methodology integrates reception analysis (focus group) with data obtained through an anonymous questionnaire, designed to contextualize the results of the qualitative research. Television fiction is the favourite macro-genre of young people, especially women. Broadly speaking, participants appreciate the greater proximity of Spanish fiction, which favours the different mechanisms of identification/projection activated during the reception process, and they acknowledge that TV fiction has a certain didactic nature. The research highlights the more intimate nature of female reception compared to the detachment of the male viewer, who watches fiction less frequently and assimilates it as pure entertainment. Age influences the different modes of reception, while the social class and origin of participants hardly have any impact. Confident, rebellious and ambivalent characters are found to be more interesting than the rest. By contrast, the structure of the story and a major part of the topics addressed by the programme are usually consigned to oblivion, highlighting the importance of selective memory in the interpretative process, as well as suggesting the limited nature of the effects of television fiction.

RESUMEN

El artículo resume los principales resultados de una investigación integrada en un proyecto más amplio sobre la construcción de la identidad juvenil y de género en la ficción televisiva. La metodología combina el análisis de la recepción («focus group») con los datos obtenidos mediante un cuestionario anónimo, destinados a contextualizar los resultados del estudio cualitativo. La ficción televisiva es el macrogénero preferido por los jóvenes, sobre todo por las mujeres. En general, los participantes aprecian la mayor proximidad de la ficción española, propiciadora de los diferentes mecanismos de identificación/proyección activados en los procesos de recepción, y le reconocen un cierto carácter didáctico. La investigación pone de manifiesto el carácter más intimista de la recepción femenina, frente al mayor distanciamiento de un espectador masculino mucho más inconstante, que asimila la ficción con el puro entretenimiento. La edad influye principalmente en las diferentes modalidades de recepción, mientras que apenas se constata la incidencia de la clase social ni del origen de los participantes. Los personajes seguros de sí mismos, rebeldes y ambivalentes, interesan más que el resto. Por el contrario, la estructura del relato y una buena parte de los temas del programa visionado se relegan generalmente al olvido, lo que revela el peso de la memoria selectiva en los procesos de interpretación y sugiere el carácter limitado de los efectos de la ficción televisiva.

KEYWORDS / PALABRAS CLAVE

Young people, gender, television fiction, Internet, reception, interpretation, characters.
Jóvenes, género, ficción, televisión, Internet, recepción, interpretación, personajes.

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1. Introduction

Despite the influence of Cultural Studies on research into television fiction, following the impetus of feminist studies of series from the 1980s onwards (Brunsdon, 2000), many researchers have traditionally resisted admitting its innovative and educational potential, as noted by Meijer (2005), Henderson (2007) and Lacalle (2010b). Similarly, specialists' widespread interest in the processes of children's viewing (faithful consumers of the programmes targeted at them) coupled with the volatility characteristic of young viewers partly explain the void in studies on the values and opinions conveyed by television to adolescents and young adults (Von Feilitzen, 2008; Montero, 2006).

Reception analysis carried out in the 1980s revealed the tendency of young adults to appropriate content, which led certain authors to stress this group's involvement with television drama (Rubin, 1985; Lemish, 2004), while other researchers noted that knowledge of fiction-production techniques boosted young viewers' pleasure (Buckingham, 1987). Subsequently, scholars have stressed the ambivalent relationship between young viewers and fiction, which according to Geraghty (1991) fluctuates between projection and distancing. Greenberg et al. (1993) uphold the greater permeability of this target audience to dominant messages, compared to adults.

In recent years, the impetus that television fiction has undergone –fiction of a quality that is often better than in films– and the rise of new transmedia storytelling (Jenkins, 2006), which stem from the extension of programmes to the Web, has dramatically increased young people's interest (especially that of young women) in this television genre (Lacalle, 2010a). The use of new technologies by adolescents and young adults encourages their increased involvement with the Internet, resulting in a more personalised reception; this allows users to construct their own listings. Likewise, the websites linked to programmes are a kind of repository of technical and cultural knowledge that enables the main means of viewing media content to be oriented, while they also encourage reception and perform a socialising «web tribe» function (Della Torre & al. 2010).

Following on from those authors who advocate the cultural and social contextualisation of studies on viewing, the purpose of this paper is to determine the role of age and gender in the reception of television fiction. The «Adolescents' Media Practice Model» devised by Steel and Brown in 1995 and built around the dialectic between representations and interpretations performed by individuals situated in a social and

cultural environment that determines their media reception will serve as a guide by which to organise the results of this study. This model emphasizes transformations in programme content due to constant negotiation between individual action and the broader social context, organized around different phases that, in accordance with both authors' opinions, affect the interpretation process: selection, interaction and application.

2. Material and methods

This article summarises ethnographic research into television fiction conducted in Catalonia between April and July 2011. It pairs an analysis of viewing with a socio-semiotic analysis of the young characters and the discourses on fiction in the Web 2.0. Analysis of viewing presented below includes three female-only focus groups and three mixed-gender focus groups built around the following age groups: 9 to 14 (one group), 15 to 17 (two groups), 18 to 23 (two groups) and 24 to 29 (one group). The six focus groups were made up of a total of 51 participants (38 females and 13 males) who discussed the different issues related to television fiction suggested by the moderator.

In order to obtain specific data on the viewing and interpretation processes, the interviewees filled out an anonymous questionnaire prior to the group interview, which posed questions on their viewing habits, their use of the Web 2.0 linked to fiction and their participation in events organised by the fiction programmes. They were also asked about their favourite programmes and characters. Following this, the group interview per se then began; this was structured around a socio-semiotic script that intersects the different stages of viewing and interpretation: preferences, viewing habits, the incorporation of new technologies into the viewing process, the construction of interpretative communities, interviewees' relationship with the young characters in the fictions analysed; the correspondence between fiction and reality; and determinations of different television formats and genres.

The number of participants in each focus group ranged from 8 to 13, in line with the plurality of interactions sought in a dimension that would minimise as much as possible the inhibition of the most introverted members. Thus, the different groups were made up of adolescents and young adults who already knew each other and who were used to talking about issues similar to those raised in the group interview. In this way we sought to reconstruct in as unforced a way as possible the natural context of their everyday interactions,

which is the ultimate object of interpretation (Baym, 2000: 201). Thus, most of the young interviewees were friends (in Lleida and Granollers), but they also had other ties that, without excluding friendship, shaped the groups in a different way, including classmates (in Sant Cugat, Barcelona and Tarragona) and participants at an after-school activity centre for youngsters at risk of social exclusion (in Girona).

The SPSS database, which was designed to process the responses to the anonymous questionnaire, includes 51 coded cases with 64 frequencies (one per variable). These frequencies represent the total number of applications of each value of the category to all the characters in the sample. The two independent variables used to perform the correlations with the others were gender and age group. When both independent variables were crossed with the secondary variables, 126 contingency tables were generated, that is, 63 for each of the independent variables chosen. Despite the high volume of data and the limited relevance of one part of the contingency tables, we chose not to discriminate the less clarifying results in order to be as exhaustive as possible. As mentioned above, the interpretation of the resulting 126 contingency tables enables us to contextualise the discourse analysis of the group interviews summarised below.

3. Results

Fiction is the genre preferred by the interviewees, led by television fiction (98%) and followed by films (74.5%), comedy/zapping programmes, including fictionalised sketches (68.6%) and animated series (64.7%). After fiction, females opt for comedy/zapping programmes (73.7%), news (50%), reality shows (39.5%) and celebrity and human-interest entertainment shows (23.7%), while males opt for films (84.6%) and sports programmes (61.5%). By age, the 9 to 14 and 24 to 29 age groups watch more films (75%). The group between the ages of 15 and 17 was more interested in reality shows (52.6%) and celebrity and human interest entertainment shows (31.6%). Young adults aged 18 to 23 preferred humour/zapping programmes and news shows (both at 87.5%).

Half of the interviewees watch television fiction

regularly, one-third of the young adults do so very frequently and only a few do so occasionally. Women prefer Spanish fiction more than men, with men tending to prefer US programmes. By age, adolescents aged 15 to 17 are the most constant, although the 24 to 29 age group also watch their favourite programmes quite often.

3.1. Selection

Sentimental topics trigger young women's attraction for drama. Males, however, prefer comedies, even though the most important finding on men's viewing preferences is unquestionably their wide-ranging dispersion. The most popular series among the interviewees are «Física o Química» (Antena3), «Polseres

The structure of the story and even many of the subjects dealt with in the episode or chapter of the programme watched seem to be quickly relegated to oblivion, which reveals the importance of selective memory in the processes of interpretation, and possibly the limited nature of the effects of television fiction.

vermelles» (TV3) and «El internado» (Antena3). «El internado» stands out in the 15 to 17 and 18 to 23 age groups, while the dispersion in the 24 to 29 age group is such that it renders it impossible to draw a clear map of their tastes. As a whole, we can note a clear preference for fiction programmes with a high number of young actors among the leading characters.

The interviewees rank Spanish fiction beneath its US counterpart. The unjustified endings and excessive prolongation of programmes, a lack of technical quality and special effects and surplus of fiction programmes made for the family target audience are the aspects criticised the most. While some interviewees prefer characters who are self-assured, as well as «bad guys» and rebels, others chose more ambivalent characters (good/bad). Unlike gender, age is hardly a factor in the choice of favourite character.

The most popular character is Ulises («El barco», Antena3), followed by Yoli («Física o Química», Antena3) and Luismi («Aída», Tele5). Females opt for three characters from three fiction shows broadcast by

Antena3, all of whom are noteworthy for their physical attractiveness and who are tormented differently by the obstacles they must overcome in their emotional relationships, namely, Ulises («El barco»), Marcos («El internado») and Lucas («Los hombres de Paco»). In contrast to this, however, the dispersion of answers from the males remains, and even though they also include attractive young women among their favourites (Yoli, «Física o Química»), they seem to prefer caricatured adults (Amador, «La que se avecina»; Diego, «Los Serrano» and Mauricio, «Aída»). Interestingly, most of the interviewees were not able to point out the

different reasons: the first group's interest in animation, which the older family members rarely share, and the second group's interest in major international hits, which tend to be watched on the Internet even before they premiere in Spain. On the other hand, adolescents aged 15 to 17 often watch the television with other family members living in their household; therefore, this age group's preference for family-targeted programmes facilitates watching programmes together. Young adults aged 24 to 29 living on their own tend to share this form of entertainment with their partners.

The decision to watch programmes alone or with

siblings stems from the diversity of tastes among parents and children. When their preferences are the same, the family watches shows on the main television set in the house together, even though they tend not to discuss the programmes. Some young interviewees even confessed to avoiding watching television as a family because they were embarrassed to watch certain programmes with their parents. Outside the home, however, fiction becomes a recurring light topic of conversation that often binds them with other people at school or work. However, even though the interviewees tend to talk about the fiction programmes they watch with others, their preference is to do so with

Fiction does not tend to serve as a reference as the interviewees cope with their day-to-day problems. However, even though some of the plots are not very realistic, there are youngsters of all ages who try to extrapolate the ideas from the fiction to their own reality, a more marked trend among critical viewers. In fact, the sentimental relationships and entertainment of the main characters are the representations that the participants in the focus groups wanted to imitate the most often. Some youngsters also identified with the attitude and actions of the characters, contextualised according their own experience.

character that they like the least, and with the exception of those who prefer comedy, all the interviewees want the characters to evolve.

3.2. Interaction

Generally speaking, the content and the characters are determining factors when watching a fiction programme regularly or at least somewhat regularly, even though the choice of some of the participants in the focus group is conditioned by the reception context. The interviewees tend to watch fiction primarily alone, with a family member or with their partner, and only rarely with friends. Women tend to watch the programmes alone, whereas men do so with their family. By age, the 9 to 14 group and young adults aged 18 to 23 watch the most fiction alone, albeit for

their friends.

Women stand out for sharing their experiences about fiction with their group of friends. By age, girls from 9 to 14 use fiction as a topic of conversation with their friends. Adolescents from 15 to 17 tend to talk about the programmes they watch with their siblings, while the 18 to 23 age group talks less about television programmes, and the 24 to 29 age group talks about them almost exclusively with their partner.

3.2.1. TV and/or Internet

The difference between the number of interviewees who watch fiction on the television and on the Internet is quite small. Women watch more programmes on the Internet. By age, girls from 9 to 14 and young adults aged 24 to 29 prefer television, the for-

mer because at this age they are rarely free from their parents' control over the contents they watch, while the latter tend to enjoy their leisure time in the company of their partner after the workday. The age groups 15 to 17 and 18 to 23 are the ones that watch the most fiction on the Internet, data coherent with their inclination for new US shows and for watching by themselves.

Many of those who watch fiction on the television concentrate exclusively on this activity. However, some adolescents are in the habit of doing their homework as they watch their favourite programmes, while young adults aged 24 to 29 often combine watching TV with their household chores. The 15 to 17 and 18 to 23 age groups, however, tend to watch television while they use forums and social networks (sometimes on their smart phones), where they also talk about questions unrelated to the programme they are watching.

Watching TV programmes in streaming is the most popular choice among the interviewees who watch fiction on the Internet, either on the channels' official websites or on other sites². The desire to watch fiction without having to be bound by the programme schedule encourages some youngsters to download the programmes, which they then watch on television sets for reasons of technical quality. This quest for quality also motivates the interviewees who are indecisive about their favourite medium and combine the television and Internet depending on which is more convenient at any given time (such as watching programmes recorded on the computer in HD if they do not have the right television set)³.

Loyal fans tend to use the Internet to watch the episodes they were unable to watch on the TV set, while the other interviewees tend to miss those shows or ask someone to tell them what happened. The Web is also used to get information on programmes, especially by women. By age, the most visitors to these websites are the 15 to 17 year age group, who are the leading members of the fan groups (wishing to keep abreast of all the news related to their favourite fiction shows). In contrast to this, however, this activity diminishes drastically among young adults aged 24 to 29, who have more responsibilities and less free time than the others.

Almost half the interviewees talk about the programmes somewhat frequently in forums and social networks. However, the percentage of women users of 2.0 fiction resources is much higher than the percentage of men, while barely any differences can be discerned by age. The most popular social networks linked to fiction 2.0 are Facebook, Twitter and Tuenti.

The interviewees tend to use these Internet tools to look for photographs, videos or music from their favourite shows, as well as links to the websites where the original material can be found. However, they rarely contribute their opinions, nor do they tend to share contents with other users.

3.2.2. Fandom

Fourteen people, or 27.5% of the interviewees, are fans of some fiction shows and are linked to some fan group. However, no participant in the study has ever created anything such as a website or blog devoted to a character, story or actor. There are more female than male fans (31.6% and 15.4%, respectively), even though no significant differences are found by gender. By age, adolescents aged 15 to 17 years old are more involved in the phenomenon of fandom (42.1%), which gradually wanes over time (12.5% in the 24 to 29 year age group). «Polseres vermelles» (TV3) and «El barco» (Antena3), two series mainly targeted at young people, are the fiction shows with the most fans. Other programmes being broadcast at the time the focus groups were meeting («Física o Química» and «El internado» on Antena3, and «La que se avecina» on Tele5) and even some programmes that had ended («Aquí no hay quien viva», Antena3) also have young fans on the Internet. The characters with the highest number of fans are Lleó («Polseres vermelles», TV3) and Ulises («El barco», Antena3).

3.3. Application

The sentimental and relationship-based problems of the characters attract the interest of the interviewees much more than social issues. However, some young interviewees believe that television fiction is a major source of learning and that it helps them to cope with personal problems or socialisation issues. There are also youngsters who appreciate current or historical information provided by such fiction, while the remainder do not believe that it teaches them anything and only see this fiction as a form of entertainment.

The participants in the focus groups believe that the lifestyle shown on foreign fiction programmes is very different to the lifestyles of young Spaniards, thus many value domestically produced fiction precisely because it is more familiar. Nonetheless, many of the youngsters interviewed criticised the trend towards exaggeration and think that the plots, experiences or places (homes, schools, workplaces, etc.) tend to be more lifelike than the characters themselves. The youngest viewers recognise similarities with the characters' way of speaking, dressing and acting, while the

24 to 29 age group finds it hard to identify with them.

Fiction does not tend to serve as a reference as the interviewees cope with their day-to-day problems. However, even though some of the plots are not very realistic, there are youngsters of all ages who try to extrapolate the ideas from the fiction to their own reality, a more marked trend among critical viewers. In fact, the sentimental relationships and entertainment of the main characters are the representations that the participants in the focus groups wanted to imitate the most often. Some youngsters also identified with the attitude and actions of the characters, contextualised according to their own experience.

4. Conclusions and discussion

Television fiction is the macro-genre preferred by the interviewees, especially the females, whose greater loyalty to their favourite programmes is coherent with their preference for dramatic shows (mainly soap operas). Conversely, the males' inclination for comedy corresponds to the much more discontinuous nature of male viewing. On the other hand, the social class of the participants in the focus groups did not seem to influence their television viewing, nor did their origin (local or foreign). Generally speaking, the interviewees can be classified into the four groups proposed by Millwood and Gatfield (2002) according to their reception patterns and attitude towards the programmes:

- Fanatics: they are deeply enthusiastic about television fiction and follow it regularly, usually without questioning it.
- Ironic: they like television fiction, but they experience contradictory feelings, which sometimes lead them to adopt a critical attitude towards the programmes.
- Non-committed: they are attracted by television fiction but only follow it sporadically when seeking an «easy» form of entertainment.
- Dismissive: these viewers are full of prejudices against television fiction and never or almost never watch it.

Females' loyalty to their favourite fiction shows partly contradicts much of the spontaneity that Morley attributed to female viewing in 1986 and reveals the fact that the most casual planning and viewing are linked not to viewers' gender but to programme genre.

More familiar topics and typically Spanish humour are among the most highly valued aspects, as well as the characters' problems and controversial themes (Tufte, 2007). However, even though some interviewees were disdainful of Spanish fiction (compared to

that of the US), others appreciated its greater familiarity and recognised that it had a certain didactic value. Thus, the enthusiasm shown by adolescents and young adults for the Catalan show «Polseres vermelles», a drama featuring a group of children and adolescents hospitalised for serious illnesses, reveals the educational potential of fanfiction in adolescents' personal development, as noted by authors like Rebecca W. Black (2008).

The youngsters expressed their preference for the characters who are their age (Harwood, 1997). However, self-assured characters, as well as those who are rebels and ambivalent, aroused greater interest than the others, an indication of a possible cathartic identification aimed at reconciling the similarities between the characters and the viewer with the extraordinary nature of the narrative, as noted by Gripsrud, following Jauss (Gripsrud, 2005). Nonetheless, the ironic interviewees clearly understand that the characters are stereotypes and that their experiences do not resemble those of real youngsters (Spence, 1995), while the fanatics believe that the general features of the characters tend to be realistic (in the emotional sense of the concept as defined by Ien Ang in 1985). The desire to imitate the most admired characters⁴, as well as the similarities between the ways these characters speak and the viewers' speech patterns, also bring the latter closer to the fiction and reveal the constant process of mutual feedback induced by television viewing (Galán Fajardo & del Pino, 2010; Lacalle & al., 2011).

The interviewees' preferences reaffirm the influence of gender in television viewing (Lemish, 2004; McMillin & Fisherkeller, 2008), since the females prefer good-looking characters, while the males tend to prefer the unusual ones, or «geeks» even though the dispersion of male tastes makes it difficult to generalise. In any event, both appreciate the image of eternal adolescence projected in fiction by the young characters, who spend most of their time between recreation and sentimental and sexual relations (Bragg & Buckingham, 2004).

The interviewees of all ages, especially the females, preferred to watch fiction by themselves due to their divergent tastes with their parents. This thus revalidates the relationship between family roles and television viewing noted by and Morley (1986), Silverstone (1994) and Lull (1990), except that in single-parent families headed by mothers (more numerous in the analysis sample than single-parent families headed by men), the mother now controls the main television set. Contrary to what Bragg and Buckingham (2004) claim, youngsters who tend to watch television

with their family rarely comment on the more delicate topics (mainly related to sex) with their parents. Nor did the focus groups provide any indication of possible closer inter-generational ties in families, which these British authors claims characterises television viewing shared among the different household members.

However, the socialising nature of television fiction can be seen in the interviewees' enthusiasm at talking about their favourite programmes, mainly with their peers, which dovetails with the results of the study by Thornham and Purvis (2005). This enthusiasm suggests that, as Modlesky (1979) noted, some viewers may regard television fiction as a kind of extension of their family, a «second family» that enables them to create a «fantasy community» boosted today by the rising use of forums and social networks to comment on them. The ease with which the majority of the interviewees speak about fiction also reaffirms its «therapeutic» nature and its role as a catalyst of social relations (Madill & Goldmeir, 2003), to such an extent that social use or interaction (Rubin, 1985) seems to be one of the main reasons driving youngsters to consume fiction.

Youngsters also find fiction to be a way of evading their problems and everyday duties. This function has been systematically recognised by Cultural Studies researchers ever since the pioneering analysis of the series «Crossroads» performed by Hobson in 1982, which was revalidated in more recent studies (McMillin & Fisher-Keller, 2008). Hence the fanatics recognise the addictive nature of fiction, as noted by authors like Millwood and Gatfield (2002), which is only fostered by the rising hybridisation of formats characteristic of today's television production in an environment of extreme competitiveness.

The interviewees are perfectly aware of the determinations to which the different television genres and formats are subjected, something which seems to boost the viewing pleasure of ironic viewers, as Buckingham (1987) noted. However, while the fanatics prefer the plots to be surprising with unexpected twists, the ironic viewers prefer to guess at the ending and even anticipate the programme's conclusion. The ironic viewers also particularly appreciate the hybridisation and innovation of the subjects covered, as well as the technical quality (narrative structure) and technology (special effects and the look of the programmes) of the shows. Fanatics, on the other hand, mainly care about the topics and the characters.

Favourite characters, climaxes and gags are the most persistent memories, which vary substantially according to the interviewees' degree of involvement.

In contrast to this, however, the structure of the story and even many of the subjects dealt with in the episode or chapter of the programme watched seem to be quickly relegated to oblivion, which reveals the importance of selective memory in the processes of interpretation, and possibly the limited nature of the effects of television fiction. There are interviewees of all ages who try to extrapolate the elements of the story to their everyday lives. However, it does not seem that any of the interviewees believe that their real life and fictitious life are an inseparable whole, which is what is claimed by Yolanda Montero based on the results of her study on the Tele5 children's series, «Al salir de clase» (After School; Montero, 2006).

Notes

¹ See the report by A. Lenhart, K. Purcell, A. Smith & K. Zickuhr (2010). Social Media and Young Adults, written for The Pew Internet and American Life Project in 2010. Online: (www.pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx) (14-12-2011).

² According to the «Informe Anual de los Contenidos Digitales en España 2010» (Annual Report of Digital Contents in Spain 2010) by red.es, the decline in the download model in favour of streaming in recent years is due to the change in mindset, primarily among the youngest viewers, who view the reception of contents as a service without the need to have ownership of these contents.

(www.red.es/media/registrados/201011/1290073066269.pdf?aceptacion=230ed621b2afb25bab3692b9b951e2c6) (02-12-2011).

³ The «Annual Report of Digital Contents in Spain 2010» by red.es also notes that convenience is the reason that drives most web-based consumers of television and film fiction. (www.red.es/media/registrados/201011/1290073066269.pdf?aceptacion=230ed621b2afb25bab3692b9b951e2c6) (02-12-2011).

⁴ We could cite, for example, the success of «El armario de la tele» (The TV Wardrobe), the shop that commercialises the clothing worn by television characters. (www.elarmariodelatele.com) (09-12-2011).

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Digital Libraries: Electronic Bibliographic Resources on Basic Education

Bibliotecas digitales: recursos bibliográficos electrónicos en educación básica

ABSTRACT

Studying electronic bibliographic resources for basic education involves thinking about search mechanisms that meet the needs of young users. Through the investigation carried out during the educational research project «Digital libraries», it became evident that the collections explored use a language better suited to higher education. Faced with this problem, the following question arose: What are the criteria for classifying electronic bibliographic resources for basic education? The proposed investigation was non-experimental, with a non-probabilistic sample of case studies; the sample comprised 250 resources from 10 bibliographic collections. The analysis assessed resources according to: accessibility, the curricular axis to which it is addressed, and format; pedagogical, functional, technological and aesthetic aspects. The results show a mean of 3.76, which indicates that the bibliographic collections provide quality resources, although it is necessary to improve educational and functional aspects. Classifying electronic resources for basic education requires the consideration of pedagogical needs, graphical and technological qualities and, especially, the dynamic way in which information is conceived nowadays. This confirms the need to establish a set of indicators that enable teachers to select electronic resources based on basic education curricular axes.

RESUMEN

Estudiar recursos bibliográficos en formato electrónico para la educación básica implica reflexionar sobre mecanismos de búsqueda que atiendan las necesidades de los pequeños usuarios. A través de los trabajos realizados en el proyecto de investigación educativa «Bibliotecas digitales», se puso en evidencia que los acervos explorados, manejan un lenguaje para un nivel de educación superior. Ante esta problemática, se planteó la siguiente pregunta de investigación: ¿Cuáles son los criterios de clasificación de los recursos bibliográficos electrónicos para la educación básica? Se propuso una investigación no experimental, con una muestra de estudio no probabilística de casos tipo, integrada por 250 recursos que ofrecen los diez acervos bibliográficos seleccionados en base a un estudio exploratorio previamente realizado. Para el análisis, se valoraron los siguientes recursos: accesibilidad, eje curricular al que está dirigido, formato y aspectos pedagógicos, funcionales, tecnológicos y estéticos. Los resultados muestran una media de 3.76, la cual indica que los acervos bibliográficos ofrecen recursos de calidad, aunque es necesario trabajar en los aspectos pedagógicos y funcionales. Clasificar recursos electrónicos para educación básica requiere considerar necesidades pedagógicas, entorno gráfico, tecnológico y sobre todo, la forma dinámica y cambiante de cómo se concibe la información. Esto corrobora la necesidad de establecer un conjunto de indicadores que permita a los docentes seleccionar recursos electrónicos en relación a los ejes curriculares de la educación básica.

KEYWORDS / PALABRAS CLAVE

Accessibility, interactive learning, digital libraries, digital information search, children education, teaching strategies, educational resources.

Accesibilidad, aprendizaje interactivo, bibliotecas digitales, búsqueda de información digital, educación infantil, estrategias educativas, recursos didácticos.

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1. Introduction

By questioning classical conceptions and structures of digital libraries, Joint (2007) claims that they are metaphors derived from traditional definitions of libraries. He proposes a redefinition that takes into account the new technology and the way we conceive information in the postmodern era. He also warns about the complexity of building and classifying a digital library with existing standards since current information objects are ephemeral and lack permanence; hypertext collections are difficult to gather due to their mutable nature.

Indeed the Digital Library concept has been controversial because it could represent an organized collection of documents stored in digital format that also provides search services and information retrieval (Martínez, 2007). Another of the classic definitions of digital libraries is suggested by the Federation of Digital Libraries (DLB), which attributes to such organizations a wide range of functions like selection, structuring, preservation, interpretation and supply of digital resources for the user's convenience (Digital Library Federation, 2010).

The development of the new technologies of information and communication has brought interesting changes in the social and educational dynamic. A noticeable change lies on the information search mechanisms that allow the construction of knowledge (UNESCO, 2005). Although digital libraries possess a variety of digitized information, which can be accessed, it is interesting to recognize that the greater the number of electronic collections, the greater the need for efficient search strategies.

2. Framework

The recent curriculum reforms at all levels of basic education around the world bring with them the need to adapt educational materials. These reforms are a boost research and innovation associated with the technical and pedagogical work oriented to improving the achievement of students, teachers, head teachers and society's capabilities (CONACYT-SEP, 2008). As a result, the study of electronic bibliographic resources for basic education is vital.

Druin (2003) says that children's libraries developed from systems aimed at adult users provide access points whose interpretation requires higher cognitive skills, so the challenge of a digital library for children requires taking into consideration the need for access to and use of information, and the cognitive development of the students.

In this regard, Cooper (2002) confirmed that chil-

dren under seven have difficulties searching for information using alphabetic characters and socialized classifications, and they can use metadata but only if presented in a very direct way. He analyzed young children based on four developmental characteristics: cognitive, physical, social and emotional. In 2005 Cooper concluded that digital environments for children must consider balancing the familiar with new things built on prior knowledge, offer quick feedback, involve several senses and be participatory and user friendly. After inducting children aged 7 to 11 into a collaborative workgroup at the University of Maryland, Druin (2003) proposed a digital library model with emphasis on collection and cataloguing, metadata standards and the creation of new technologies to access and use the information. Once the contents were revised, Druin states that children want to get involved in the construction of libraries, have access to varied resources with different classification criteria (colors, shapes, feelings that the books awaken) and to find graphical and customizable interfaces to facilitate collaborative work.

The activities of the «Digital Libraries» educational research project revealed the prevalence of criteria derived from bibliographic collections developed for higher education. Most of these activities proposed interfaces aimed at adult users even though they offer bibliographic resources for basic education. An exploration on the basic education collections found that almost all the available electronic resources were in text format and used higher education language. Although e-collections routinely audit the cataloging processes, few examined the resources in detail during the quality control process. These findings confirm the need for continued help in the construction of electronic spaces for younger students (Gómez-Zermeño, 2010).

3. Research problem

Despite the significant volume of bibliographic resources in electronic format available for basic education that can be accessed through traditional search engines many are unreliable. Children might find it hard to perceive the relevance of such materials or receive incorrect information, which affects their learning. For Lugo and Hernández (2007), delimiting criteria for basic education electronic resources becomes a systematic tool that supports evaluation; they also point out that the current evaluation methods for digital resources are still under construction and are in constant evolution. In order to refine this process, they suggest creating standards and guidelines that can be used according to the needs and interests of users.

These authors also mention that existing work on the topic has mostly been developed in Europe and the United States. These studies focus on reviewing different types of evaluation, and report that the benchmarks and indicators used by each institution may vary. This has hindered the standardization of this activity because, in spite of the proliferation of digital libraries, there are few documented evaluation proposals for these information systems, most of which were made to solve practical problems; hence the need for the scientific community to explore the topic further (Ramírez, 2006).

Current literature related to libraries shows that progress has been made on the internationally accepted benchmarks and indicators required to assess the quality of bibliographic resources. Similarly, this research-project will generate more knowledge on this emerging study area by creating a model for the diagnosis of bibliographic resources in electronic format for basic education by identifying strategies that guide and assist teachers in optimizing the use of technological resources in their schools, and in developing digital materials to enhance the learning experience of their young students.

The «Digital Libraries» educational research project aimed to lay the foundations of a model for the diagnosis of bibliographic resources available in electronic format for basic education. The work undertaken in the first phase sought to generate relevant information about the collections of electronic bibliographical resources for basic education with the aim of identifying their main characteristics and defining a set of selection criteria. The second phase of the project underlined problems that led us to ask: What are the characteristics and classification criteria for electronic bibliographic resources for basic education?

4. Theoretical framework

Nowadays, educational technologies provide the opportunity to strengthen educational models through access to new ways of exploring, representing and acquiring meaningful knowledge. In an environment mediated by technology, a competent user needs a symbolic code or language in order to locate resources,

and so technological advances and the abundance of information have forced users to establish quality criteria in the use of tools that facilitate the search for relevant resources. This, rather than a simple information search activity, represents a task that demands cognitive abilities from the user based on the culture from which he or she perceives, interprets and appropriates the knowledge that helps the student to understand a specific theme and the construction of his or her own learning (Barber, cited by Fainholc, 2005). For Bernhard (2002), search and selection processes of relevant information demand skills for handling tools that facilitate the inquiry as well as the proper use of unfamiliar search engines. Relevant information search

A noticeable change lies on the information search mechanisms that allow the construction of knowledge (UNESCO, 2005). Although digital libraries possess a variety of digitized information, which can be accessed, it is interesting to recognize that the greater the number of electronic collections, the greater the need for efficient search strategies.

requires more than the learning associated with «computer literacy».

4.1. Bibliographic resources in digital format

Today's technology is a tool that allows us to access information through processes that can break down barriers of space and time. For Torres (2000) the library of the future is designed as a space without walls in which all resources can be cited, gathered and consulted anywhere by the user. A digital library houses a collection of objects (also called items, resources or materials) such as books, periodicals and documents in HTML format web pages, as well as multimedia objects like images, recordings or video files (Sharon & Frank, 2000), therefore, fixing the bases of a model for evaluating bibliographic resources in electronic format requires taking into account the qualities of the information objects in electronic format, and because these resources are dynamic, establishing classification criteria has become much more difficult. For example,

hypertext collections are hard to gather due to their mutable nature. An analysis of the characteristics of digital resources also means reviewing their quality. Thus, a typological classification of bibliographic resources in digital format is a complex task because of the continuous changes that occur in such a dynamic environment.

4.2. Indicators for assessing bibliographic resources

New media and information items have new reference systems that are generally adaptations of standards used with bibliographic materials. Marquès (2003) suggests that electronic bibliographical resources are materials that integrate various textual (sequential and hypertext) and audiovisual (graphics, sound, video, animations, etc.) elements that can be useful in educational contexts. To assess their quality, the following parameters should be considered: a) pedagogical, b) functional and c) technical and aesthetic. According to Merlo (2003), the assessment process of electronic information resources requires specific planning that involves four key elements:

- Parameters: generic aspects to be evaluated, in order to establish blocks in terms of the scope of the analysis.
- Indicators: elements that give information about each of the parameters. They are the specific issues to be assessed.
- Procedures: methods used to make the application of parameters and indicators effective.
- Resources: objects that are necessary to the assessment process such as the instrumental, documentary and human resources required.

In the search and selection of resources that seek to strengthen the learning process, Ochoa (2007) suggests considering the following aspects:

- Quality, Depth and Usefulness of the Content: clear content, appropriate for the intended audience, useful links to other sites.
- References: broad perspective of a particular theme; availability of references to answer specific questions.
- Content Unity: the resource is presented as a whole.
- Updated Content: frequent renewal and maintenance.
- Copyright: information about the background and purpose of the organization, authorship and legality clearly indicated.
- Ease of use: friendly design, simple navigation, attractive graphic design in search engine, fast information retrieval.

- Customer service: contact information, correct e-mail addresses; prompt answers to questions.
- Efficiency: download of optimized pages, available plug-ins, fast and reliable server.
- Web Optimization: integrated components (audio, video, text, etc.), effective use of new technologies, useful information.

4.3. Bibliographic resources in electronic format for basic education

Educational research recognizes technology as a means for teaching and learning, and its important role in the education of children, but the opinion of these young users is rarely considered (Dressang & Gross, 2011). There is also a gap between the ideas of implementers and user's needs. As technology becomes an integral part of children's lives, Yohalem & Pittman (2003) declare that kids should participate in this work being done on their behalf. In a study conducted in the United States and Canada, it was found that only four out of 63 libraries were designed and created by children. This lack of involvement might have been related to a time shortage or the project's limited resources (Druin, 2003). The way children prefer to organize content is not often taken into account, even though all users—including children—require computer environments that meet their specific needs (Greenstein & Thorin, 2002).

With the aim of obtaining more related information, the International Children's Digital Library project at the University of Maryland put together a multidisciplinary, multigenerational team made up of researchers and children aged 7 to 11 (Druin, 2003). This experience yielded the following findings: 1) children want to get involved in this kind of project, 2) collections must consider offering books about boys and girls from different backgrounds, 3) collections should include a large amount of fiction books and books dealing with multicultural themes or different cultures and should contain, 4) old and new books, 5) the search mechanisms need to protect children from inappropriate information, 6) there should be a system for copyright payment, 7) metadata should consider the way in which children perceive the world, 8) the tools must be useable at home and enable collaboration, 9) interfaces should be graphically appealing, and 10) resource development must find a balance between innovation and users' needs (Druin, 2003).

This means that the role of the teacher in the selection of content for children's digital libraries is essential, and, according to Druin (2003), an especially relevant task in the field of children's libraries is to pro-

test end-users from harmful information. So, the teacher's new role will be a combination of facilitator and protector of information.

In order to establish the basis for a model to diagnose bibliographic resources, Pirella and Ocando (2002) refer to the following objectives: a) to complement education, b) to elaborate the curriculum, c) to promote educational materials, d) to improve teaching practice, e) to expand creativity, f) to foster reading, and g) to ensure lifelong learning and research.

5. Methodology

In designing the research, the techniques selected must be completely independent of the researcher's epistemological approach and implemented from a set of additional factors in order to answer the investigation question (Schmelkes, 2001). For Keeves (1988), it is important to acknowledge that in educational research there are different paradigms and epistemological ways of knowing and constructing knowledge. Since it is impossible to manipulate the independent variables, the methodology of our study was exploratory-descriptive and non-experimental (Gómez-Zermeño, 2009). Borgman (quoted by Cabrera and Coutín, 2005) implies that any assessment encompasses aspects of evaluation and measurement that must be carried out in a systematic way. The initial proposal was to begin the research with an exploratory study that would provide the information for a descriptive study. To switch from the exploratory to the descriptive study, a new «observation guide» to assess electronic bibliographic resources was designed. The guide considered pedagogical, functional, technological, and aesthetic aspects (Marquès, 2003). Each aspect evaluated five variables; each variable consisted of five indicators. The indicators relating to curricular axes of the basic education curriculum (SEP, 2008) were also integrated. A pilot test was performed in order to verify reliability in two of the collections. It tested the measuring instrument, conditions for application and the procedures involved.

6. Analysis

To diagnose the electronic bibliographic resources, 56 collections were explored during the first phase of the project. Then, 23 collections focusing on basic education were chosen. Lastly, a non-probabilistic sample of 10 representative collections were selected for analysis (Hernández, 2008, quoted by Gómez,

2009): 1) International Children's Digital Library; 2) World Library; 3) National Library of Virtual Manipulatives; 4) Chile for Children; 5) New Library for the Mexican Child; 6) Latin American Institute for Educational Communication (ILCE); 7) Universal Virtual Library; 8) «Know your World» Library for Children; 9) Storyplace; 10) The National Science Digital Library

The research results show that the 10 selected collections were mostly developed by public or international institutions; five call themselves «digital» and the other five «virtual»; only two operate via distributed implementation, the rest are independent libraries that host their resources in a single server with direct access. According to Druin (2003) children's libraries offer the opportunity to display various types of resources in order to strengthen educational activities. To achieve this, the teacher must assume an active role in selecting the collections and resources.

The following categories analyzed 25 random resources per collection (250 in total) according to the indicators proposed.

- Curricular axis. A high percentage of objects meet the demands of the curricular axis 'exploration and understanding of the natural and social world' topics. This confirms that resources can contribute to the development of new ways in which students may explore, represent and acquire knowledge (Escudero, 1995). The resource must lead to young students acquiring transversal knowledge.

Curricular axis	Percentage
Language and Communication	18.7%
Mathematical Thinking	11.7%
Exploration and Understanding of the Natural and Social World	57.8%
Personal Development for Coexistence	11.7%

Table 1. Curricular axis frequency.

- Format. Sharon and Frank (2000) state that electronic collections house documents, HTML web pages, multimedia resources, images, sound and video. The resources evaluated in the study were mostly in text format.

Format Type	Percentage
Text	41.3%
Image	23.5%
Sound	3.6%
Video	3.4%
Multimedia	28.2%

Table 2. Format frequency.

- Evaluation indicators. The evaluation of electronic resources takes into account educational, functional and technical-aesthetic parameters (Marquès, 2003). It was found that the re-

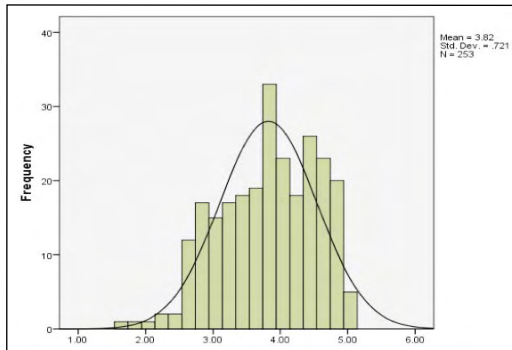


Figure 1. Resources results for quality parameters.

search collections offer quality resources (see Figure 1), with new technologies enriching educational models and making communication easier.

• The average by parameter analysis (see Table 3) clearly shows the area of opportunity in which to improve the quality of electronic resources for basic education.

Parameter	Result
Pedagogical	3.73
Functional	3.62
Technical-aesthetic	3.82

Table 3. Average by parameter.

sang & Gross (2011) explain that resources backed up by technological means can aid the educational development of young users. In this regard, Pirela and Ocanco (2002) suggest that electronic bibliographic resources should consider the curriculum, working for the development of creativity, learning and research, and offering the teacher permanent training in order to complement the educational process in basic education (see Figure 2).

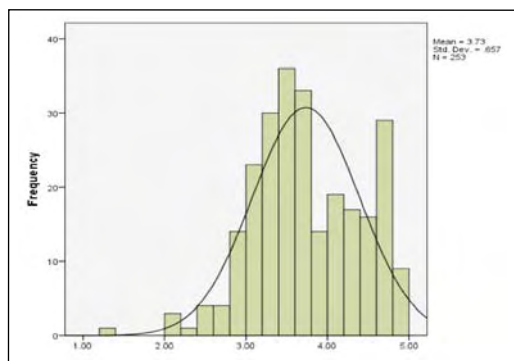


Figure 2. Resources results for pedagogical aspects.

See Table 4 in relation to pedagogical variables:

• Motivational capacity: the resources arouse curiosity and encourage inquiry.

• Adequacy and adaptation to users: the contents were appropriate for basic education users, but the activities and the resource background could be improved.

• Resources: greater synthesis, and more summaries and schemes are needed to facilitate the cognitive process of assimilation.

• Tutorial and assessment: The resources relate to the basic education curricular objectives, and they are useful for lesson planning. However, the feedback the student gets to correct or explain mistakes must improve.

• Pedagogical approach: Resources support meta-cognition but should promote more collaborative work.

• Functional aspects. Bernhard (2002) states that the process of search and selection of relevant information demands skills for handling technological tools.

Variable	Result
Motivational capacity	4.28
Adequacy and adaptation to users	4.15
Resources	3.78
Tutorial and assessment	3.13
Pedagogical approach	3.89

Table 4. Results for pedagogical variables.

Developing these skills requires the resources to be easy to use, ergonomically comfortable and design-friendly (Ochoa, 2007; Codina, 2000; Cooke, 1999) (see Figure 3).

See Table 5 for Functional variables:

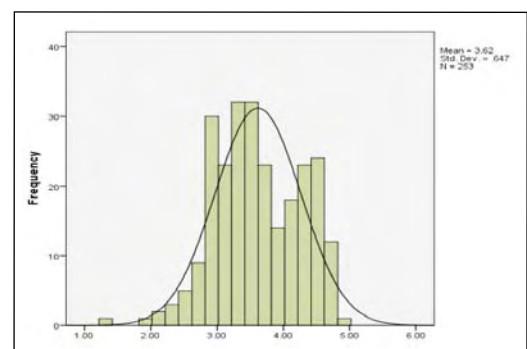


Figure 3. Resources results for functional aspects.

• Ease of use: The access and use of the resources was easy, but they do not have a Help section.

• Information Retrieval: It is easy to retrieve information, especially when the resource has an index, but they do not show how to get information from other resources.

• Versatility: The resources can easily adapt to dif-

ferent educational contexts. Nevertheless, there is a need for open content resources, multilingual objects and Administrator tools to make adjustments.

- **User Autonomy and Control:** resources offer clear and precise instructions that make them easy to operate.

- **Global Functionality:** the resources were found to be adequate for educational purposes; they are efficient, relevant and effective for young students. Electronic objects must be of sufficient quality to satisfy learning expectations (Marquès, 2003).

- **Technological and aesthetic aspects.** Although

Variable	Result
Ease of use	4.07
Information retrieval	3.50
Versatility	2.70
User autonomy and control	3.35
Global functionality	4.45

Table 5. Results for functional variables.

work has been done on dynamic interface design, the starting point must be to find out how children prefer to organize content and how to improve computer environments based on the specific needs of young users (Greenstein & Thorin, 2002) (see Figure 4).

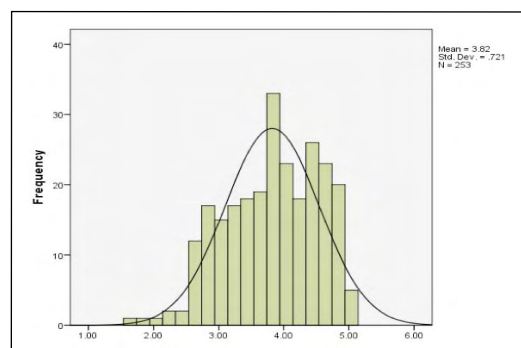


Figure 4. Resources results for technological - aesthetic aspects.

- Further information about Technological-Aesthetic Variables in Table 6:

- **Visual environment:** The visual aids and screen resolution were good, texts complied followed grammar and spelling conventions.

- **Data Bases:** Content is relevant, well-selected, developed with clarity and quality; it is important to be accurate and update information.

- **Navigation:** Clear, structured navigation maps make resources ergonomic, but hypertext with more information should be included.

- **Interactive Dialogues:** Young students should have the option to enable or disable functions according to their preferences.

- **Technology and Design:** In order to be reliable and original the resources need to be supported by advanced technology.

Variable	Result
Visual environment	4.17
Data bases	4.09
Navigation	3.92
Interactive dialogues	2.95
Technology and design	3.95

Table 6. Results for technological-aesthetic variables.

7. Conclusion

Ensuring quality of education means designing parameters, variables and indicators to standardize the evaluation of electronic resources for digital libraries. The development of electronic collections for basic education opens up the possibility of spaces that host reliable and relevant information for young students. In the Mexican context, an indicator guide was designed based on the needs and interests of teachers and students as well as the basic education curricular axis in order to evaluate the relevance of educational resources in three key aspects: educational, functional and technical-aesthetic.

Throughout the study, the characteristics and classification criteria of electronic bibliographic resources were identified via an evaluation guide. Regarding the pedagogical aspects, resources should motivate the student to be inquisitive and creative through a dynamic and appealing environment, so it is imperative that the content be based on educational purposes to enrich the cognitive experiences. The added value of resources must be the ability to feedback the learning of young students. In the case of functional aspects, an educational resource in electronic format should be easy to use and give the user autonomy and control to interact with it. The objects should allow the young students to make adjustments, modify content according to their cognitive ability, offer clear instructions and an assistance system. In the technical-aesthetic aspects, the resources were found to be adequate for basic education, with an attractive visual background and well-represented in terms of colors, text, sound, image and language. Even when the information is relevant, it is necessary to provide hypertext to guide the knowledge acquisition process.

To classify electronic resources for basic education is a complex process. It must consider pedagogical

needs, graphic appeal, technological aspects and, especially, the dynamic way in which information is now conceived. The research confirms the need to establish a set of indicators to guide teachers in the selection of electronic resources, and mix them with educational activities according to the curriculum axes of basic education in Mexico.

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The ConRed Program, an Evidence-based Practice

El programa ConRed, una práctica basada en la evidencia

ABSTRACT

The incredible force with which ITCs have arrived in society and the consequent risks to children when dealing with the Internet and social networks make it necessary for the domain of virtual environments to be included in the school curriculum. However, the initiatives in this direction are limited and there is a lack of rigorously evaluated programs that might act as a basis for designing educational lines of action. The ConRed Program is based on the theory of normative social behavior and aims to reduce problems such as cyber-bullying and addiction to the Internet and refocus the misadjusted perception of information control in the social networks in order to promote their use in a more beneficial way. The ConRed Program has been evaluated using a quasi-experimental methodology, with an experimental group (N=595) and a quasi-control group (N=298) consisting of 893 students (45.9% girls) with an average age of 13.80 years (SD= 1.47). The reduction of problems in the experimental group and the lack of change in the control group is evidence of the program's validity, and show that by working and collaborating with the whole educational community it is possible to improve the quality of the virtual and, therefore, the real life of adolescents.

RESUMEN

La vertiginosa incorporación de las TIC a la sociedad y los consecuentes riesgos a los que los menores se enfrentan en Internet y las redes sociales han dejado en evidencia la necesidad de incorporar en el currículum escolar el dominio de los entornos virtuales. En cambio, son escasas las iniciativas en esta dirección y más aún programas rigurosamente evaluados, de modo que sirvan de fundamento para el diseño de las líneas de acción educativa. El programa ConRed está basado en la teoría del comportamiento social normativo y persigue los objetivos de mejorar y reducir problemas como el cyberbullying, la dependencia a Internet y la desajustada percepción del control de la información en las redes sociales, para así potenciar el uso beneficioso de éstas. La evaluación del ConRed se ha desarrollado mediante una metodología cuasi experimental, con un grupo experimental (N=595) y uno cuasi-control (N=298). Del total de los 893 estudiantes, el 45,9% eran chicas y la edad media 13,80 años (DT=1,47). Los resultados positivos de reducción de problemas en el grupo experimental y la ausencia de cambio en el grupo control son muestra de su validez y demuestran que trabajando con toda la comunidad educativa y en colaboración con ella es posible mejorar la calidad de la vida virtual y, por tanto, real de los adolescentes.

KEYWORDS / PALABRAS CLAVE

Cyberbullying, addiction, privacy, psycho-educational intervention, evaluation, social networks, Internet.
Ciberbullying, adicción, privacidad, intervención psicoeducativa, evaluación, redes sociales, Internet.

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1. Introduction

1.1. Internet and social networks: a new social environment

The increasing use of information and communications technologies (ICTs) in everyday life has brought about considerable changes in many areas. One such area is that of interpersonal relationships, which are now no longer exclusively direct but also indirect and conducted by means of digital devices. We now live in what Azuma (1997) calls «augmented reality»: our activities tend to combine physical reality with virtual elements capable of supporting and improving them. Internet, and in particular social networks, plays a major role in this augmented reality, especially among young people, a group which uses these resources to an increasingly greater extent. Latest figures in Spain show that 55% of regular Internet users access social networks, rising to 84% among young people aged between 10 and 18 (Garmendia, Garitaonandia, Martínez & Casado, 2011), an age group in which nine out of 10 boys and girls have a social network profile.

Social networks represent the most important facet of Internet's social dimension. They are essentially web services that are used for regular communication and sharing information, in which users make up an online community where they can interact with other people who share some or all of their interests (Boyd & Ellison, 2007). The key to the potential of social networks as a unique, attractive environment for interpersonal relationships lies in this element of self-selection. It has been claimed, perhaps with some exaggeration that the social situation of a person who lacks friends or contacts in a social network differs from that of a person with real friends and online contacts (Christakis & Fowler, 2010). Life is now lived in both physical and virtual environments. In terms of cultivating interpersonal relationships these virtual environments offer new opportunities, creating what Azuma (1997) calls «augmented reality» in which the interdependence of the physical and virtual worlds is taken for granted and the differences between the two are passed over. Virtual resources offer several social advantages: they make it easier to establish interpersonal relationships, they contribute to diversity in the types of social relationships cultivated, they facilitate ubiquity and they increase the amount of information available in real time (Winocur, 2006). But these advantages can become disadvantages if they are used incorrectly. Belonging to a social network means making decisions about our own intimacy (Liu, 2007), and those decisions are not always made consciously or sensibly

(Stuzman, 2006). In other words, virtual life involves certain identity-related issues that people need to learn to deal with (Reig & Fretes, 2011).

1.2. Risks posed by Internet and social networks

The use of Internet and social networks involves certain risks which are particularly serious among children and young people (Dinev & Hart, 2004; Echeburúa & Corral, 2009; 2010; Graner, Beranuy-Fargues, Sánchez-Carbonell, Chamarro & Castellana, 2007; Ortega, Calmaestra & Mora-Merchán, 2008). They include: a) loss of control over personal information accessible on Internet; b) addiction to this type of technology and the consequent absence or decline of activities or relationships necessary for healthy development; and c) cyber-harassment, as an indirect form of the age-old problem of school bullying.

Lack of control over information can be exploited by others to ridicule, intimidate or blackmail (Dinev & Hart, 2004; Dinev, Xu & Smith, 2009). The information uploaded by a person, or by others, constitutes the basis for the virtual identity that is being created for that person. Although it may not affect the person's everyday life (Turkle, 1997), manipulation of that information by others or lack of control over it by the person in question may place that person in a position of vulnerability by removing their intimacy (Nosko, Wood & Molema, 2010) thereby damaging their social relationships. One example of this is «sexting» (McLaughlin, 2010; Stone, 2011), a practice which is becoming increasingly widespread among Spanish teenagers (Agustina, 2010) and which involves posting half-naked pictures in virtual environments. This is inevitably harmful for minors, who believe that their conduct in those virtual environments is in no way connected to their real lives (Menjívar, 2010).

Internet activity can create addiction. Boys and girls who spend a lot of time in front of a computer screen, neglecting their duties and their own leisure time and basing their relationships with others on technological interaction, may begin to show signs of unease when they are not using a computer or a cell phone. ICTs abuse is a risk which may negatively affect quality of life for teenagers in a hyper-technological world, reducing their freedom and possibly creating addiction (Echeburúa & Corral, 2009; 2010).

Cyberbullying is another risk posed by the virtual world for teenagers and young people. For bullies this virtual environment offers a space less invigilated by adults and by the authorities (Tejerina & Flores, 2008). Cyber-harassment can be divided into two main types: «grooming» and «cyberbullying».

Grooming, also known as «child-grooming» in legal parlance, refers to the procedure by which an adult establishes a relationship with a minor in order to achieve some kind of sexual satisfaction (Monge, 2010). Cyberbullying is defined as aggressive intentional acts carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself (Smith, Mahdavi, Carvalho & Tippett 2006). Many researchers consider it an indirect form of traditional bullying (Ortega & Mora Merchán, 2008; Smith & al., 2006), characterized by a series of specific features which include: a) the channels of communication are always open, and aggression can therefore take place at any time and in any place; b) attacks can be witnessed an indefinite number of times by large numbers of spectators and c) victims may never know who their attackers are because the channels used allow a high degree of anonymity.

These risks have increased because it is precisely teenagers and young people who have become computer literate much faster and to a much broader extent than the adult population, thus giving rise to what is known as the digital gap (Piscitelli, 2006, Marín and González-Piñal, 2011). Significantly, 80% of young Spaniards say they learned to use Internet without the help of an adult (Bringué & Sádaba 2011).

1.3. School: a key area for encouraging cyber-socialization

Schools play a crucial role in developing children's technology skills (OECD, 2005). Such skills should not be seen merely as familiarity with tools and devices, but should be addressed jointly with other capabilities, such as those of citizenship and personal autonomy (Ricoy, Sevillano & Feliz, 2011). In the new skills-based approach to syllabus design, the functional, healthy mastery of ICTs constitutes a basic building block for the development of personal autonomy, learning-to-learn skills and a cosmopolitan sense of citizenship (Ortega, Del Rey & Sánchez, 2011). The need to take action and help the whole education community is also a priority issue in new psychosocial

models based on scientific evidence (Del Rey & Ortega, 2011). Schools should be seen as learning communities in which interaction between the players involved can be analyzed in terms of their mutual support as complementary elements within the task of educating. Schools are places of convivencia (harmonious interaction) and development in which young people should play a major role as learners: in the field of digital literacy, they are often ahead of their own responsible adults. This may upset the teaching-learning pattern and make it necessary to rethink conven-

Internet activity can create addiction. Boys and girls who spend a lot of time in front of a computer screen, neglecting their duties and their own leisure time and basing their relationships with others on technological interaction, may begin to show signs of unease when they are not using a computer or a cell phone. ICTs abuse is a risk which may negatively affect quality of life for teenagers in a hyper-technological world, reducing their freedom and possibly creating addiction.

tional approaches. Teenagers and young people, considered digital natives (Prensky, 2001), may be quicker and more efficient in the use of digital devices but they nevertheless need support and supervision in the psychosocial processes which take place when socializing is conducted via digital activity. The generation gap mentioned above needs to be narrowed so that it can be the corresponding adults –teachers and families– who educate minors in the new facet of life represented by Internet.

But the same thing has happened here as so often happens in education. The need to take action has arisen before the scientific community and, above all, the public authorities, have the information necessary to be able to establish suitable procedures. Although in Spain a series of good practices do exist with this objective in mind (Luengo Latorre, 2011; Del Rey & al., 2010; Mercadal, 2009, and others), no empirically proven practices, procedures or evidence –based programs are yet available (Navarro, Giribet & Aguinaga,

1999; Sackett, Richardson, Rosenberg & Haynes, 1997). Nevertheless, any decision regarding a plan of action to be implemented at school should ideally first be corroborated scientifically (Davies, 1999; Granero, Doménech, Bonillo & Ezpeleta, 2001; Hunsley & Johnston, 2000; Lindqvist & Skipworth, 2000; Stoiber & Kratochwill, 2001). Scientific research is therefore necessary to determine whether a given program or procedure is effective, by analyzing the significant changes brought about by a program and comparing the outcome to what would have happened if that program had not been implemented.

havior is heavily influenced by perceived social norms and their interpretation as an indication of social consensus. In other words, a close relationship is identified between the behavior and actions of the majority and what that majority perceives as being socially acceptable, normal or legally justifiable. In some action programs based on this theory and aimed at addressing teen problems such as alcohol consumption, links have been found between the belief that consuming alcohol is good for establishing social relationships or belonging to a peer group and increased alcohol consumption (Borsari & Carey, 2003).

Despite its limitations, the study allows us to conclude that projects implemented today to encourage harmonious interpersonal relationships (convivencia) in schools should at least be supported by short term initiatives addressing social relationships in virtual environments. We know that by involving students, teachers and families it is possible to improve young people's knowledge of and control over social networks, narrow the generation gap which exists between digital natives and immigrants and alleviate the problems associated with the inappropriate use of ICTs.

According to the theory of normative social behavior, beliefs can be measured in terms of the three aspects which constitute what are known as normative mechanisms Rimal & Real, 2003): a) injunctive norms; b) expectations and c) group identity. Injunctive norms are rules subject to sanctions or social punishment. In the case of action taken to reduce alcohol abuse, for example, laws exist which penalize drunken driving and there is a clear social rejection of people guilty of this type of conduct. Expectations are what each individual, depending on his/her beliefs, hopes to gain from engaging in a given type of conduct (Bandura, 1977; 1986).

ConRed (Discover, Construct and Live in Harmony on Internet and in Social Networks), the action program presented here, is designed to encourage the correct use of Internet and Social Networks. It was developed in line with the tenets of «Evidence Based Practice» (EBP), taking into account scientific evidence presented in different research papers describing programs which successfully molded or modified behavior in cases where technology was being used incorrectly or as a vehicle for inappropriate conduct (Borsari & Carey, 2003; Haines & Spear, 1996; Wechsler & Kuo, 2000).

1.4. The ConRed program

The ConRed program adheres to the tenets of the «theory of normative social behavior» (Lapinski & Rimal, 2005; Rimal & Real, 2005; Rimal, Lapinski, Cook & Real, 2005), which argues that human be-

havior is heavily influenced by perceived social norms and their interpretation as an indication of social consensus. In other words, a close relationship is identified between the behavior and actions of the majority and what that majority perceives as being socially acceptable, normal or legally justifiable. In some action programs based on this theory and aimed at addressing teen problems such as alcohol consumption, links have been found between the belief that consuming alcohol is good for establishing social relationships or belonging to a peer group and increased alcohol consumption (Borsari & Carey, 2003).

The program's three key overall objectives are: 1) to show the legal implications and the damage that can be caused through bad conduct in virtual environments; 2) to highlight specific actions which are closely linked to Internet's risks but very far removed from

Internet's benefits and 3) to reveal how certain forms of conduct do not reflect specific social groups or make a person more acceptable as a member of such groups. Taking these three considerations as a point of departure, the ConRed program is designed to aid and sensitize the education community in the safe, positive, beneficial use of Internet and social networks.

To attain these goals, the following specific objectives were established: a) to stress the importance of familiarity with safety and personal information protection mechanisms on Internet and in social networks, to avoid the bad use of the same; b) to learn to use Internet safely and healthily, fully aware of its potential benefits; c) to find out how widespread cyber-harassment and other risks are in secondary education; d) to prevent involvement in acts of aggression, harassment, denigration, etc., either as victims or perpetrators, in social networks; e) to help and encourage an attitude of resilience in people affected by violent or harmful conduct on Internet; f) to find out how users perceive the degree of control they exert over the information they share on social networks and e) to prevent ICTs abuse and show the consequences of technology addiction.

The ConRed action program was aimed at the whole education community: training sessions were held with teachers and the families of schoolchildren, with the schoolchildren themselves forming the principal target group.

The work done with each group revolved around three areas: a) Internet and social networks; b) benefits of Internet use and instrumental skills and c) risks and advice on usage.

The sequence followed, both for the training and the measures implemented, started with a brainstorming session to explore the children's/teachers'/parents' prior knowledge about technology use, functions and Internet. Content was then introduced to look at the opportunities offered by social networks. Particular attention was paid to the importance of privacy and identity and the negative consequences of not having them. The themes of pro-social behavior and solidarity in social networking were examined, with special attention to the main risks posed by social networks and the consequences of using them inappropriately. Last but not least, the main strategies for dealing with social networking problems were described, together with the most important tips on how to use ICTs properly.

Taking school as a place of social interaction and convivencia, ConRed launched an awareness-raising campaign using materials like leaflets, posters, stickers,

bookmarks, etc. to keep the initiative going over a period of time.

The starting hypothesis was that the implementation of the ConRed program would alleviate and reduce problems such as cyberbullying, Internet addiction and erroneous perceptions regarding the degree of control exerted over information in social networks.

2. Materials and methods

The program was evaluated with a quasi-experimental, ex post facto, longitudinal design, with pre- and post- measurements, covering two groups, one of which was a quasi-control group (Montero & León 2007). The target population comprised adolescents between the ages of 11 and 19. The program was carried out directly in the classroom.

- **The sample group.** The sample group was made up of 893 students –595 in the experimental group and 298 in the control group – from 3 secondary schools in the city of Cordoba, Spain. 45.9% of the group were girls, and the students' ages ranged from 11 to 19 years ($M=13.80$; $DT=1.47$).

- **Instruments.** Three instruments were used, relating to cyberbullying, the addictive use of Internet and perceived control over information. They were: the European Cyberbullying Questionnaire (Del Rey, Casas & Ortega, 2011), comprising 24 Likert items with five frequency options ranging from never to several times a week and with adequate internal consistency: α total=0.87, α victimization=0.80 and α aggression=0.88; a version of the CERI (Internet-related Experiences Questionnaire) adapted by Beranuy, Chamarro, Graner and Carbonell-Sánchez (2009) and comprising 10 Likert items with four options (not at all, little, somewhat and a lot), with acceptable internal consistency: α total =0.781, α intrapersonal=0.719 and α interpersonal=0.631; and the Perceived Information Control scale (Dinev, Xu & Smith 2009), a 4-item Likert-type scale with seven answer options reflecting the degree of agreement (from not at all to very much) and a good level of internal consistency: $\alpha=0.896$.

- **Procedure.** The ConRed program was implemented over a period of 3 months during the 2010/11 school year, with schools timetabling and providing facilities for several work sessions. Two groups were created: the measures prescribed in the program were adopted in one of them (the experimental group) and not in the other (the control group). Data was collected on two occasions: once before program implementation (pre-measurements) and once after (post-measurements).

• **Analysis.** Data was analyzed using SPSS statistical software, Version 18.0, in Spanish. The mean factors obtained were compared using a Student's T-test to compare the significance of the difference in the mean scores obtained for individuals in the experimental and control groups on the two occasions when measurements were taken.

3. Results

Possible differences between the experimental and control groups prior to the implementation of the ConRed program were first analyzed using a Student's

		M	D.T.	t	P
Victimization	Pre-test	,1360	,27702	-,182	,855
	Post-test	,1403	,34056		
Aggression	Pre-test	,0924	,27128	,152	,879,
	Post-test	,0892	,30346		
Cyberbullying	Pre-test	,1106	,25050	-,143	,887
	Post-test	,1135	,28487		

Table 1. Cyberbullying Control Group.

T-test for independent samples. No significant starting differences were found in the variables: cyberbullying ($t=-1.421$; $p>0.05$), cyberbullying aggression ($t=-$

		M	D.T.	t	P
Victimization	Pre-test	,1188	,26425	2,726	,007*
	Post-test	,0811	,23000		
Aggression	Pre-test	,0682	,22816	1,644	,101
	Post-test	,0502	,14701		
Cyberbullying	Pre-test	,0924	,20203	2,717	,007*
	Post-test	,0645	,16500		

Table 2. Cyberbullying Experimental Group.

1.858; $p>0.05$), cyberbullying victimization ($t=0.567$; $p>0.05$), addition to Internet ($t=0.560$; $p>0.05$), interpersonal addition ($t=0.527$; $p>0.05$), intrapersonal addition ($t=0.323$; $p>0.05$) and control over information ($t=1.754$; $p>0.05$).

Differences between the experimental and control groups and between pre-test and post-test measurements were then analyzed using a Student's T-test for related samples. With regard to cyberbullying, no differences were found in the control group between pre-test and post-test values: Cyberbullying ($t=-0.143$; $p>0.05$), Cyberbullying aggression ($t=0.152$; $p>0.05$), Cyberbullying victimization ($t=-0.182$; $p>0.05$) (see table 1).

Differences were, however, found in the experimental group: Cyberbullying ($t=-2.726$; $p>0.05^*$), Cyberbullying aggression ($t=1.644$; $p>0.05$), Cyberbullying victimization ($t=-2.726$; $p>0.05^*$). Here, values were

lower after program implementation (see table 2).

Likewise, in the control group no significant differences were found between the pre-test and post-test values with regard to the abusive use of/addition to Internet (see Table 3): Addition to Internet ($t=0.233$; $p>0.05$), Interpersonal addition ($t=0.128$; $p>0.05$), Intrapersonal addition ($t=-0.273$; $p>0.05$). But differences were found in the experimental group: Addition to Internet ($t=.458$; $p>0.05$), Interpersonal addition ($t=2.300$; $p<0.05^*$), Intrapersonal addition ($t=-1.596$; $p>0.05$) (see Table 4).

Finally, with regard to perceived control over information, the results for the control group were similar ($t=-0.692$; $p>0.05$) whereas analysis of the results for the experimental group revealed significant differences between pre-test and post-test measurements ($t=3.762$; $p<0.01^*$) (see Table 5).

4. Discussion

The ConRed program produced positive results with regard to the three main objectives proposed: a) to reduce students' involvement in cases of cyberbullying; b) to reduce the excessive use of Internet and the risk of addiction; and c) to alter students' perception of the amount of control they had over personal information uploaded to social networks. The results obtained reflected significant changes in the impact of these three proposed training objectives. The experimental group obtained better results after the program's implementation than the control group, in which some types of conduct and attitudes (for example, perceived control over information) even increased. This would seem to support the starting hypothesis that implementation of

		M	D.T.	T	P
Intrapersonal addition	Pre-test	,92	,657	-,273	,785
	Post-test	,93	,697		
Interpersonal addition	Pre-test	1,46	,697	,128	,898
	Post-test	1,46	,682		
Addition to Internet	Pre-test	1,19	,595	,233	,816
	Post-test	1,18	,624		

Table 3. Addiction to Internet Control Group.

		M	D.T.	T	P
Intrapersonal addiction	Pre-test	,90	,691	-1,596	,111
	Post-test	,95	,730		
Interpersonal addiction	Pre-test	1,45	,712	2,300	,022*
	Post-test	1,39	,730		
Addiction to Internet	Pre-test	1,18	,643	,458	,647
	Post-test	1,17	,691		

Table 4. Addiction to Internet Experimental Group.

the ConRed program would lead to a decrease in certain undesirable forms of adolescent behavior.

Among the students who took part directly in the ConRed program there was a general decrease in involvement in cyberbullying, in the abusive use of Internet and in the false perception of control over information; this latter result suggests a greater awareness of the students' own lack of information about how to control their own data, their subsequent vulnerability and the usefulness of learning and using strategies to augment their control and keep the personal information they upload to Internet private.

		M	D.T.	T	P
Control group Control over Information	Pre-test	5,26	1,860	-1,596	,490
	Post-test	5,34	1,791		
Experimental Group Control over Information	Pre-test	5,51	1,631	3,762	0,000*
	Post-test	5,15	1,844		

Table 5 Perceived Control over Information Control Group and Experimental Group.

Previous scientific literature contains no consolidated groundwork regarding the implementation of action programs to combat cyberbullying in schools, although work has been done on traditional school bullying and specific programs have been proposed to prevent harassment and violence among schoolchildren. Such programs have produced positive results, demonstrating that sustained, controlled, whole policy action can improve interpersonal harmony and prevent school violence and bullying. One example is the SAVE project (Seville Anti School Violence), an action approach based on scientific evidence (Ortega, 1997; Ortega & Del Rey, 2001). ConRed adopted the same parameters (working with students, teachers and families to improve knowledge and raise awareness about how information can be controlled) and produced comparable results (Tofi & Farrington, 2009). We believe that cyber-harassment is an indirect form of traditional bullying –i.e., indirect bullying (Smith & al., 2008)–; and that whole policy preventive models are therefore still valid. This is fully coherent with the importance now being attached to the school as the

place where this type of problem can best be dealt with (Luengo Latorre, 2011). The results of this study support the idea that whole policy measures are an effective means of reducing high risk behavior. We have shown how by raising risk awareness and training teachers and parents to guide young people's behavior it is possible to reduce high risk conduct, increase the taking

of precautionary measures and induce protective attitudes in online activity, without creating undue alarm among schoolchildren. From our point of view this is one of the key results because help given to victims, and their awareness that they have someone there to help them and advise them, reinforces their confidence and dispels the sense of weakness and isolation which prevents them from facing up to these kinds of problems (Hunter & Boyle, 2004).

ConRed itself illustrates the need to curb the potentially excessive use of Internet and to reduce the risk of addiction to online activity by raising students' capacity

to deal with the online challenges they may face. It should be remembered that addiction is one of the great risks to development during adolescence (Echeburúa & Corral,

2009; 2010). However, addiction to Internet is best addressed through action on a very personal level, more comparable to that which might be taken by a clinical psychologist (Griffiths, 2005). Studies into the importance of the interpersonal aspect of addiction have shown that it is necessary to educate students in Internet use and encourage healthy attitudes and conduct in online activity (Machargo, Lujan, León, López & Martín, 2003).

The pre-test showed that young people generally have very little idea about the business dimension of the online platforms to which they belong. ConRed demonstrated how a specific educational program can effectively contribute to redressing this potentially dangerous lack of information about social network usage, and we feel this is one of the program's most positive achievements. Our results reveal how important it is that risk prevention on Internet and in social networks should form part of the school syllabus: They also show that this training does not necessarily have to be carried out in a virtual environment. The action taken should be seen as part of the job of educating the

young; part of the students' learning process and just another subject teachers are required to impart as part of the syllabus. Teachers should receive ongoing training in this field, thereby narrowing the digital gap which separates them from their students and enabling them to provide help and guidance. In the same vein, families should know about their children's online social environment in order to be able to help and support them. To conclude, ConRed has shown how, by working in collaboration with the whole education community, it is possible to improve the quality of adolescents' lives, both virtual and real.

The ConRed program is the beginning of a series of evidence-based practices aimed at improving the society in which we live through education. Nevertheless, this study inevitably has certain limitations and further research yet needs to be carried out. For example, our data was collected from only three schools and the research team played a very active role in the action taken with the students. In the future, more schools should be included in the research and responsibility for the program should be passed on to each school's teaching staff, providing them with the autonomy they should ideally enjoy when implementing programs of this type.

Despite its limitations, the study allows us to conclude that projects implemented today to encourage harmonious interpersonal relationships (convivencia) in schools should at least be supported by short term initiatives addressing social relationships in virtual environments. We know that by involving students, teachers and families it is possible to improve young people's knowledge of and control over social networks, narrow the generation gap which exists between digital natives and immigrants and alleviate the problems associated with the inappropriate use of ICTs. And that is how cyberbullying, and especially cyber-victimization, can be reduced. In view of all this, at least four things should be taken into consideration by the education authorities: the vital importance of awareness-raising campaigns in the education community; the main line of action should be teacher training and the boosting of teachers' confidence in their ability; this should ideally be articulated through the introduction of new education legislation; and financial support is needed to make it possible.

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The Analysis of Interactive Media and Digital Culture - Hypermedia Literacy in Peru and Bolivia

Medios interactivos y cultura digital: Alfabetización hipermedia en Perú y Bolivia

ABSTRACT

This paper compiles data on how the use of hypermedia, interactive multimedia and interfaces have changed the classical dynamics of human communications and education to create a new paradigm. This paradigm originates in the interface since it allows multidirectional and multimedia communications through interactions with the elements of which it is composed. This research describes the different aesthetic, narrative, emotional and value elements that are integrated within the cultural hypermedia interfaces. These hypermedia elements are fundamental components to be taken into account in the creation of educational interactive media products. The communicative functions are interchangeable between sender-receptor, author-reader-author, creator-user, professor-student... thanks to the introduction of multimedia interactive expressions and technological instruments that allow several types of interactions. This flexible functionality generates new communicative as well as dramatic models of interactive narrative, where the interaction of receptors-senders and reader-authors with the narrative actions occur at the character or avatar level. The interfacial aesthetic, narrative, emotional and value elements are studied, analyzed and described in detail thanks to an innovative model of analysis that can be used to for the implementation and design of interactive edutainment media products. The application of this model helped to create cultural content interfaces enabling not only the development of interactive educational workshops in the USA, Peru and Bolivia for more than 200 students, but also multisensory and immersive communications with quality.

RESUMEN

El trabajo se centra en las formas en que interfaces multimedia interactivas e hipermedia han cambiado las dinámicas clásicas de la comunicación y educación humanas creando un nuevo paradigma. Éste se origina en la interfaz, al permitir la multidireccionalidad comunicativa multimedia mediante la interacción con los elementos que la componen. Esta investigación describe los diferentes elementos estéticos, narrativos, emocionales y de valores integrados en las interfaces hipermedia culturales. Dichos elementos hipermedia son componentes fundamentales a tomar en cuenta durante la creación de productos multimedia interactivos educativos. Las funciones comunicativas son cambiantes entre emisor-receptor: autor-lecto-autor, creador-usuario, profesor-alumno... gracias a la introducción de expresiones multimedia interactivas e instrumentos tecnológicos que permiten distintos tipos de interacciones. Esta flexibilidad funcional genera nuevos modelos comunicativos así como dramáticos, de narrativa interactiva, donde la interacción de los receptores-emisores, lecto-autores, con las acciones narrativas se produce a nivel del personaje o avatar. Los componentes estéticos, narrativos, emocionales y de valores de la interfaz son estudiados, analizados y descritos en detalle gracias a un modelo innovador de análisis que sirve para la implementación y diseño de productos interactivos lúdico-educativos inmersivos. La aplicación de este modelo ayudó a la creación de interfaces de contenido cultural, permitiendo desarrollar no solo talleres educativos interactivos en Estados Unidos, Perú y Bolivia para más de 200 estudiantes, sino también una comunicación inmersiva multisensorial de calidad.

KEYWORDS / PALABRAS CLAVE

Media literacy, innovative didacticism, design, interactivity, immersion, interactive communication, multimedia. Educomunicación, innovación didáctica, diseño, interactividad, inmersión, comunicación interactiva, multimedia.

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1. Introduction. The hypermedia interface as the new paradigm of communication

The start of the 21st century has seen a huge increase in the number of hours the youth spend on using new technologies, which has led to numerous studies into why video games are so attractive. The model presented in Epigraph 3.3 can be used and redirected for the transmission of cultural and educational content through new media. Gee (2003: 200-212) underlines the importance of studies from the perspective of learning about the new media elements that young adults find most attractive.

To study the hypermedia interface was the main purpose of this research since it is the main technological and expressive channel that gives access to interactive and multidirectional media communications. New media integrate the qualities of interactivity and multimedia within the digital interfaces. The hypermedia interface is changing the human communication system due to its interactive ability as well as the multisensory qualities of the hypermedia. Each hypermedia element that forms part of the interface is located exactly between the information flow generated by several communicative actors, the original author of the interactive media product and its users, players, students or receptors. According to Osorio & Duarte (2010) «interaction can be defined as the cognitive and social actions between the actors of the educative process (student-professor, student-student) in the development of the learning activities». The term interactivity used in this research is also similar to the definition given to it by Meadows (2003: 37-39) «to denote the relationship between the human/s through an object, the computer [...] The interactivity requires the fulfillment of a series of guidelines to have flow».

This approach can also be used to answer important contemporary questions in the area of edumunication and alphabetization with new media. Questions that are important to find answers to, such as: how can we develop immersive interfaces for educational content?, or González-Faraco and Gramigna's (2009) statement that «by studying both the logic of video games and how players understand them, we can develop interesting ideas for re-thinking theories on knowledge and education».

The interface is defined by the «RAE dictionary», «Diccionario de la Real Academia de la Lengua Española», as «the physical and functional connection between two devices or independent systems». «The New Oxford American Dictionary» describes the interface as «a point where two systems, subjects, organizations, etc, meet and interact». In this sense, the inter-

face is the physical and functional connection between the interactive communicative system, its interactive aesthetic and narrative expressions and the human system of perception and communication. It is Moreno-Muñoz's (2000: 114) definition that fits best with this research: «the mixture of hardware and software that the reader-author uses to communicate with the hypermedia program». The interface synthesizes the conjunction of interactive expressions and educational content organized within the multi-sensorial representations permitted by informatics. The author-sender of the didactic communication manages the technological possibilities in order to transmit educational representations and narratives. Thus, he will try to create original expressions organized in an attractive multimedia form that can stimulate a new interaction in the student. Then, he becomes a reader-author, receptor-sender, even student-professor committed to the learning process. The main goals and motivation behind this research were to find those principles that add quality and depth to interactions with the hypermedia interface and the edutainment content.

2. Material and methods

The material and methods used in this research integrate an interdisciplinary approach that results from the complexity of the hypermedia interface. It includes areas of interactive communication and narrative with perception, education and psychology, among others. The following materials observe and describe how the original form of that fusion between communicative expressions and narrative representations occurs thanks to the hypermedia interface. This research was initially conducted by the application of new models of communication and analysis of the hypermedia elements, tested on several educational interfaces over a period of 8 years using discussion groups, surveys, questionnaires, multi-camera observations, content analysis, etc. The models presented have been applied to different educational and cultural interactive media projects, and this paper includes the improved versions of these models. The conclusions of previous research were applied to several projects, like the creation of an online interactive museum (www.multiculturalvideos.org) presented at the Communicability Workshop, ACM Multimedia Conference (Mora, 2008), or the prototype which won awards for a massive cultural multiplayer online game called Exchanging Cultures EC Game. These conclusions were also applied to the design and software selection of the international cooperation educational intervention for hypermedia alphabetization in Peru

and Bolivia, within a group of 200 students. Thanks to the application of these models successful interactive educational workshops were developed, and the most immersive digital video editing software was selected for use during the intervention, e.g.: Final Cut, Premiere and Sony Vegas. The implementation of new innovative models of analysis of hypermedia interfaces were developed and tested during this process, and the results are detailed in the epigraph that follows. These models can be used in educational environments, cultural videogames, interactive museums, cinema, webs, digital journalism and augmented reality.

2.1. Sample group and description of the experience

This interactive educational strategy and models were field tested, confirmed and applied in one recent international cooperation experience between USA and Spain, in Peruvian and Bolivian educational and cultural institutions in the cities of Cusco, Puno, La Paz and Oruro, with the participation of approximately 200 students during the summers of 2010 and 2011. As Arcila & Said (2011) underlined «According to the results, a good part of digital media in Latin America are incorporating web 2.0 tools, but there still exist notable quality differences in the ranking proposed between the best rated media (Colombia and Mexico) and the worst rated (Chile and Bolivia)». The cooperative goal was to introduce and educate Peruvian and Bolivian artists and students in audiovisual and multimedia communications, using hypermedia interfaces and software for digital video editing. This way they were able to develop videos for the Internet while audiovisually promoting and conserving their Quechua, Aymara and contemporary Andean cultures.

To obtain that goal, several video editing interfaces such as Final Cut, Adobe Premiere and Sony Vegas were offered to the students, and installed on their own computer stations or on those brought by the cooperating organizations. These software programs were the most current versions and were compatible with PC or Mac systems, so every student could find a familiar way to interact and learn through

the process. Moreover, we brought the most updated and/or expressive versions, so the students could have hypermedia interfaces to materialize the representations and contents they wanted through easy immersive interactions. The classes were also designed to be interactive, so after a brief and synthesized explanation about writing a script, organizing technical equipment for recording, or about capturing and editing the recorded images, the students could interact with the equipment and the software interfaces. Finally, they were able to apply the lessons, expressing and materializing their representations right away by using the hyperme-

New media integrate the qualities of interactivity and multimedia within the digital interfaces. The hypermedia interface is changing the human communication system due to its interactive ability as well as the multisensory qualities of the hypermedia. Each hypermedia element that forms part of the interface is located exactly between the information flow generated by several communicative actors, the original author of the interactive media product and its users, players, students or receptors.

dia interfaces. That way they also helped implement the teaching techniques during the experience, since they were very interactive with the lessons, the tools and the contents they were using. The results were surprising: 10 videos, 10 minutes each, were produced in a week, made by groups of three to seven members, in a class of 60-70 students per city. There were a total of 45 videos, and the experience also allowed the implementation of the model of analysis of effective hypermedia interfaces, presented here in the following epigraph 3.3.

2.2. Methods applied for observing the interactive communications

The following systems were applied during the research experience to implement the dynamics of alphabetization in media literacy. The traditional dialectic system of mass media communication developed by Martín-Serrano (1982: 159-174) is presented in Figure

1, and contrasted with the model in Figure 2, which includes the new elements that the hypermedia communication system integrates.

The hypermedia interface can be located in the center of the cross in Figure 2 since it interconnects and interexchanges all the communication elements: actors, expressions, representations and instruments.

In the hypermedia communicative system, the positions and functions of the communicators change

and courses, future generations will be more able to participate in their own learning processes, thus producing better objective results. In that sense, the hypermedia system is ideal for the construction of culture, since it can be an open system for the exchange and discussion of ideas.

The differential characteristic of hypermedia communication is not only the exchange of functions between the actors of communication as a result of the technological tools, but also the fusion of traditional communications media and digital computing technology (Manovich, 2001: 25), all that allows for a new system of communication that is interactive and multimedia. Any type of expression is potentially able to be used. That is why the multimedia aspect is the one that, with the interactivity, better defines the hypermedia communication system.

A diagram, based on the different educational and communicative experiences analyzed using hypermedia interfaces, has been created for describing the elements and systems that participate in the interactive communications. Presented in Figure 3, it synt-

hesizes in a general, iconographic and schematic way all the elements and systems that interact with and within the hypermedia communication system. It gives us a clear overview of the original aspects of the hypermedia communication system and how it configures a new model of communication and system of interactions.

2.3. Methods applied to analyze the interactive narrative

There is a new dramatic theory for interactive narrative systems developed in several schemas by Mateas (Wardrip-Fruin & Harrigan, 2004: 22), see Figures 4 and 5. The immersion or the mediatory identification is generated in the hypermedia communication through the interaction with the character or through the actions of the reader-author. All the following expressive elements can be interactional; it is possible to do an expressive communicative interaction about them. However, within the hypermedia communication system, it is at the level of the character and the actions that the avatar, the reader-author or player, materializes the expressive interaction, the immersion or the mediatory identification. That is why the expressive elements that appear in the interface are

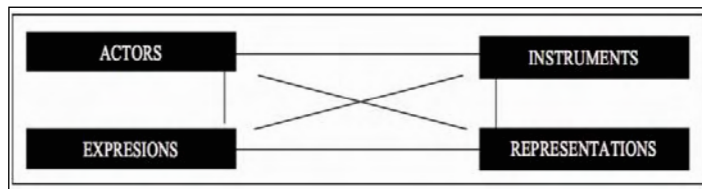


Figure 1. Elements of the Mass Media System of Communication
(Source: Martín Serrano, 1982).

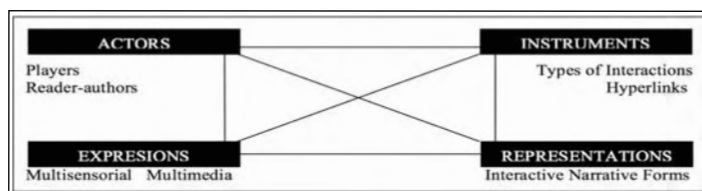


Figure 2. Elements of the Hypermedia System of Communication.

over time, when the communicative phenomenon is produced through interactivity. The hypermedia interface allows this exchange of roles since it integrates multi-sensorial expressions with different types of interactions. The actor looks forward to communicating his own representations through the interface, whether, he is communicating with an artificial intelligence (AI) system such as a one-player video game, or with other human actors, such as playing in a massive multiplayer online game (MMOG). Afterwards, the receptor actor decodes mentally and emotionally the representations contained in the multimedia expressions presented through the interface. Then, the differential moment of the interactive communication is when the motivated actor decides to activate the multi-directional system of communication, using his interactions over the hypermedia interface, and coding his own representations to communicate them to a new receptor, a.k.a. reader-author, student-professor, author-reader, or the first sender. The most characteristic moment is when the exchange of roles between actors occurs: the sender becomes the receptor and vice versa. If this main characteristic of the hypermedia system is taken into account in the pedagogical development of new and interactive media materials, classes

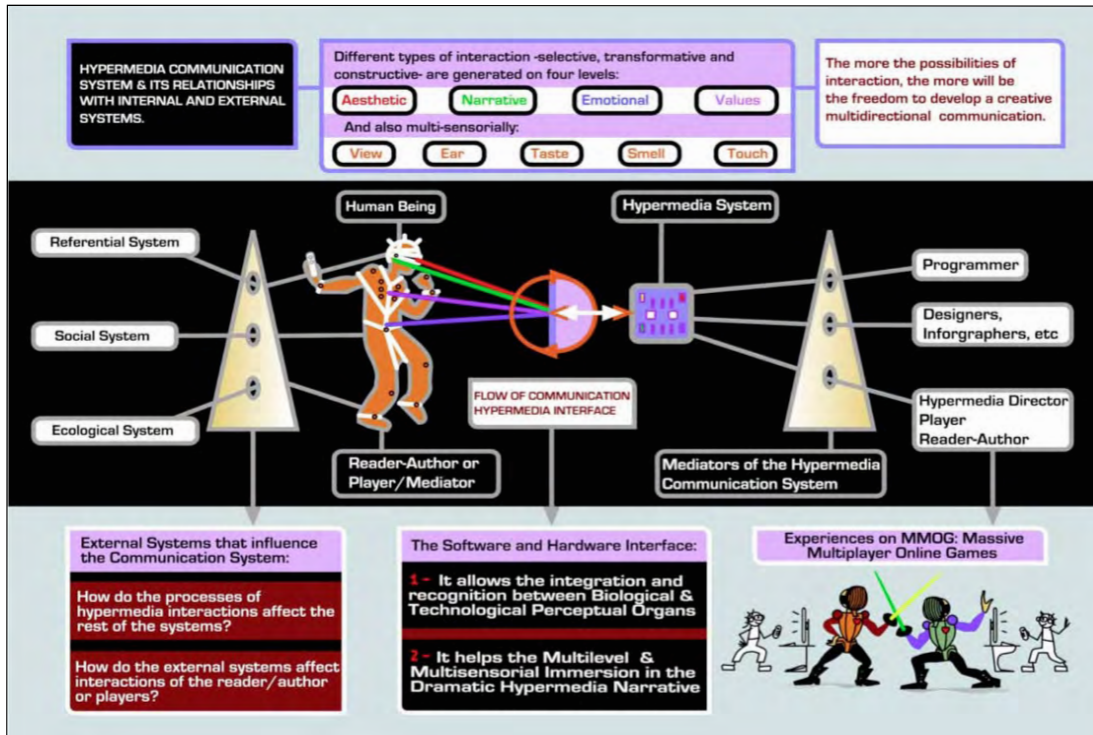


Figure 3. Elements and relationships in the hypermedia communication (Source: self•design in collaboration with www.reinicio.net).

described as elements that serve the interaction and construction of the character or avatar. Shown below, in two schemas, are the differences between the dramatic theory by Aristotle and the updated schema purposed by Mateas.

Mateas (Wardrip-Fruin & Harrigan, 2004: 22-23) gives an explanation of the traditional schema: Aristotle analyzes the works in hierarchical categories, in the center of the schema, corresponding to the different parts of the creation. Those categories are related through formal and material causes. The material cause of something is the material from which is created. The expressive material, from the perspective of communications theory, is compounded by the multimedia expressions and the characteristics of the hypermedia narrative. The formal cause is the abstract plan, the goal or the ideal through which something is directed. The motivational goal, the organized expressions and the narrative structures are created to transmit a plot or theme, which is then associated with certain values. This is also done within interactive media so that it becomes more successful. Kojler (2005: 272) underlines how the most popular Japanese video games have used cinematographic techniques to attract interaction. The video game Donkey Kong from Miyamoto was the first one to introduce a narrative of start/ middle/end in a video game and the narrative structure has

been very influential over other games: «from the Electronic Gaming Monthly's 2001 list from the 100 better video games, 78 had elements of narrative lines and another eight recognized at least clear characters».

In the new model of the interactive drama, Mateas (Wardrip-Fruin & Harrigan, 2004: 22-23) explains «the player has been added to the model as a character who can choose his own actions. This has a consequence».

The player, reader-author, organizes his interaction plan and directs it through the character category. The player collaborates, or can collaborate, in the construction of the proper narrative forms to communicate a plot or theme, with their corresponding values, coming from both the author and the player of

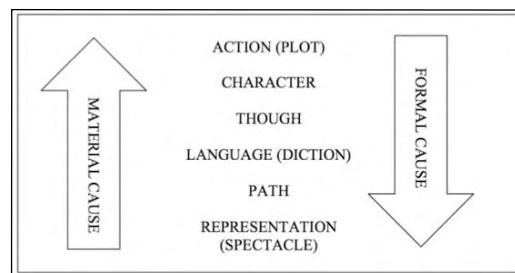


Figure 4. Classic schema of Aristotle's theory for creating dramatic narratives.

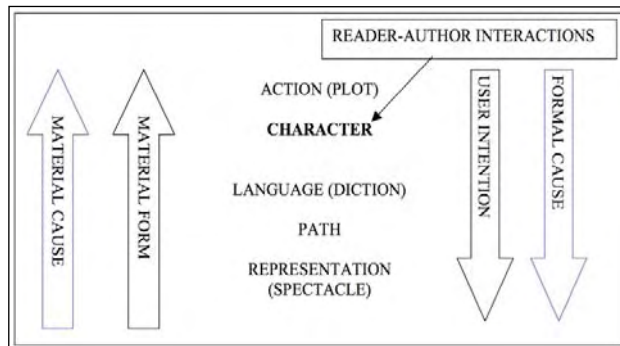


Figure 5. Michael Matea's schema of a new dramatic theory for interactive systems.

the game. Mateas (Wardrip-Fruin & Harrigan, 2004: 22) continues describing the function of the interactive drama in the game in the following manner «But this ability of taking action is not completely free; it is limited from behind by the material resources...». The interactive multimedia expressions, as well as the spatial and temporal variables, become the constrictions that the game offers, «...and from over it by the formal authorial cause originated at the level of the plot». The author directs the theme of the game or interactive narrative and the main actions of the plot. The English term «affordance», which, when applied to hypermedia can be translated as the availability of interactive multimedia expressions, is also a constriction to the interactions. Nevertheless, this constriction can be made up through the interface design, within a broad variety of hypermedia expressions. When the interaction is attracted by some expressions and developments of the dramatic plot, it would generate a more engaging interaction. The fact that the forms of interaction can be developed through some or all perceptual senses of the player, also means a level of constriction or freedom depending upon the adaptation of the technological tools of the game to the biological senses of the player. This happened for instance with the original Eyetoy, from Sony, most recently with the Wii, from Nintendo, or lately with the Kinect, from Xbox 360.

3. Results

The original interdisciplinary integration of the previous new models, specially of the previously presented interactive communication and narrative models, lead to the creation of integrated and innovative models for analyzing hypermedia interfaces, which have been proved during the research experiences. In the most recent experience in Peru and Bolivia, a remarkable total of 45 videos were produced in 4 one-week workshops. They were created through the interaction of both first time

and initiated audiovisual and multimedia practitioners. A remarkable experience was to observe how the interactive communication system and the new technologies helped the development of media literacy in multiple contexts. Moreover, using an interactive educational model served not only to produce great quantities of videos in a short period of time, thereby letting students learn through completing the whole production process, but also contributed to the quality of the video narratives and techniques: 65% of the videos produced during the workshops had semi-professional quality. Some of the videos were even presented later on in video festivals or even projected on a Bolivian national TV, like the ones titled «Waxia Ritual» or «Paqarina», which are still online on the channel www.youtube.com/multicultural-videos.

3.1. Validity and functionality of the resulted models

The validity and functionality of the following models of analysis of the hypermedia interface has been proven in several previous scientific researches such as on «Smoke & Mirrors», developed by Sheldon Brown, ex-director of the Center for Research in Computing and the Arts from the University of California San Diego. Moreover, these models of analysis were corrected and they were used as descriptors within the design of an experiment consisting of the observation of the most attractive and interacted expressive, narrative, emotional and value characteristics of the interface for the teenagers. The models were applied also to the analysis of successful video games with some didactic contents, such as Antigrav from Sony, or Sims2 from Electronic Arts. The effective use of the model as an analytical qualitative tool, served to find which immersive combination of expressions and narrative interactive forms served better for the transmission of cultural and educational values to the youth (Mora, 2009).

Moreover, these proven models are presented as conclusive tools, since their application has been very useful in the design of video game and multimedia prototypes. One of them was the Exchanging Cultures EC Game, an educational video game awarded a prize by USC's Annenberg School of Communication, which was embedded on the MMOG Second Life. This game consisted of an interactive museum, located within SL, where the players were able to learn about different countries and cultures through the exchange of original art, food recipes, architectures, customs and other cultural items. Another recent

application of the models was during the interactive media workshops developed in Peru and Bolivia.

3.2. Models integrating the interactive communication and narratives

The next, Figure 6, summarizes in detail the communicative elements that intervene during the interaction with the interface, where the functional roles are changed from sender to receptor, author-reader or professor-student, and vice versa. These are the interactive dimensions we focused on and observed during the research in order to discover which interactive media expressions improved the immersion or the identification in educational interactive media products. The following Figures 6 and 7 take into account the research of Dr. Isidro Moreno (2003: 110-114) and Mateas (Wardrip-Fruin & Harrigan, 2004: 22) and they are integrated and updated by Dr. Mora and his research experiences from 2003 until 2010, mentioned in the previous epigraphs.

In this schema we can see the elements that compound the hypermedia interface: expressions, narrative forms, emotions and values; these configure the information transferred during the communication human-interface. As Moreno-Muñoz (2000: 57) explains «the human beings as information processors experience a series of levels in the information process». The symbol on the top right represents another similar hypermedia communication system, from other reader-author, who generates another communication system human-interface-human when connected online with another player.

The following, Figure 7 synthesizes the interactive elements and the dramatic narrative processes generated by the player, reader-author, through the interface. It displays the communicative moments when the change of roles between sender and receptor happens, as well as the hypermedia narrative.

In a simplified way, this schema describes the moments when the interface communicates expressions of the different narrative forms. It also illustrates the dramatic narrative structure

and how it is organized in the communication between the reader-author and the hypermedia interface. Figure 8 summarizes the generation and process of the hypermedia narrative at the moment of the interaction.

3.3. Model of analysis of hypermedia interfaces

The following model of analysis, developed by the author of the present paper, is the result of the integra-

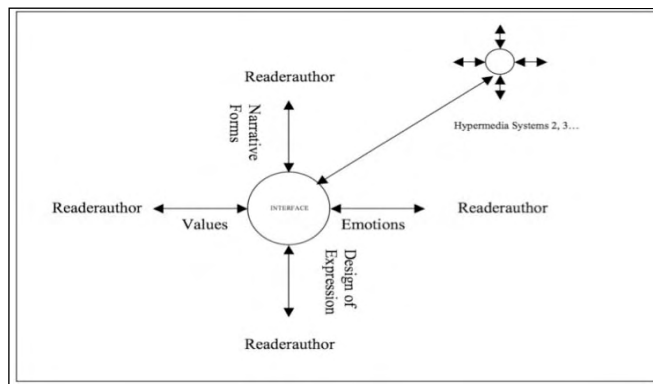


Figure 6. Interactions on different levels between the reader-author, or user, and the hypermedia interface. (Resource: self-creation).

tion of several personal and other previously mentioned research projects. It serves to focus on the hypermedia elements that can be managed during the design and production of immersive and interactive educational projects. The goal of this classification of the hypermedia elements was to create different models of descriptive analysis which could be applied to the analysis of any hypermedia. The model is focused on describing in detail the expressive and narrative characteristics that can be present through the interface. That way it is possible to analyze what types of inter-

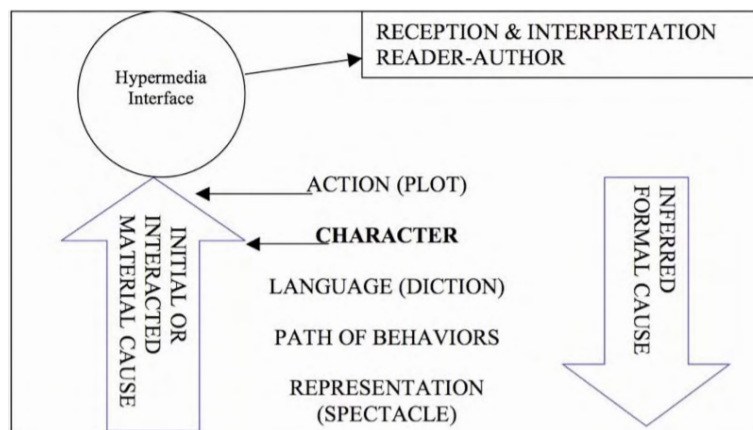


Figure 7. This flow is how the interactive elements and the dramatic narrative processes are generated by the student-player or reader-author.

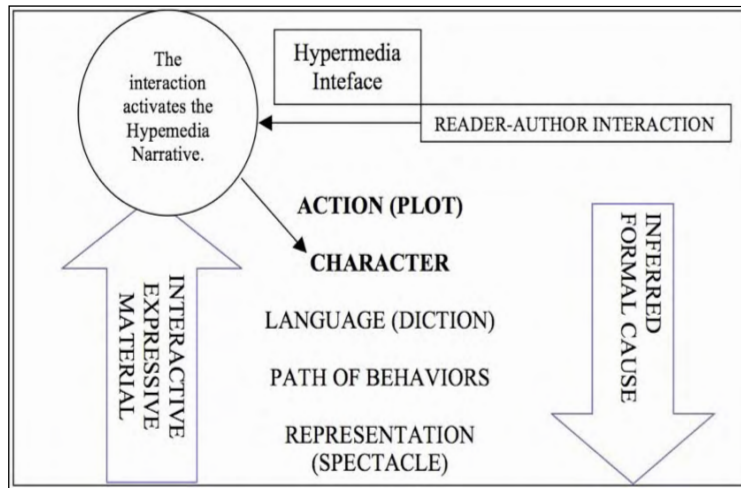


Figure 8. Through this schema it is shown how the player, reader-author, interacts with the different forms and levels of the dramatic narrative through the hypermedia materials offered by the interface.

active interfacial expressions can develop different kinds of interaction, as well as with which narrative elements: space, time, characters and/or actions.

Through the exhaustive identification of these interfacial elements, and their dramatic organization, it is possible to develop research projects that observe the different moments developed by the hypermedia communication. These observations allow the identification of the elements of the interface that are more attractive and that motivate the most immersion and identification. Those combinations of expressions, narratives, emotions and values that are more activated and used represent the most effective interface designs. Davenport and the members of the Interactive Cinema Group from the MIT Media Lab (2000: 456-459) emphasize during their research the importance of contents, how the structural form is organized and how the expressive resources are the substantial components for the user's participation and emotional implication. That is one of the main questions that motivated the creation of a model by the author of this paper. The following model allows observation of what the relationships between the expressions are, each narrative form: action, characters, spaces and times; the types of interaction, and the ethical or unethical values communicated through the hypermedia interface.

The empty cells and the subcategories below some categories serve to describe the qualities of the different characteristics, and are to be filled and/or chosen during the description of the interface analysis. The characteristics of each element that is not applicable can just be deleted, and the ones that are pertinent

can be described further. This model has served to implement and increase the multi-sensory immersion and level of entertainment in educational interactive media. The model only includes the descriptions of the terms that might not be found easily in a good dictionary.

4. Discussions

In synthesis, the previous innovative models can be applied to implement any educational hypermedia products and media literacy in multiple contexts. It is recommended that the qualitative analyses that the model facilitates be used in combination with

quantitative systems allowing the quantification of the interactions with each of the interface elements. One of the most effective is the multi-camera audiovisual recording technique, so the real and virtual actions or the inter-actors are registered in synchronicity. This methodological combination serves to contrast the real interaction facts, developed while using the interfaces, with questionnaires, interviews and group discussions. It also serves to quantify the number of interactions in relationship with the qualitative expressive data described using the analytical model, Table 1.

4.1. Potential applications of the models in new media literacy

The analytical process of an in-depth study of hypermedia interfaces is complex and multidisciplinary, especially when taking into account all the different aesthetic, narrative, perceptual, emotional and values variables. The study of broad groups of young adults or of other ages requires a great investment in multiple scientists and experts from different knowledge areas such as: communication, narrative, pedagogy, sociology, cognitive, perceptual and cultural psychology, anthropology, ethics, statistics... With professional teamwork it is possible to broadly apply the model of Table 1 to build a system of producing educational video games and hypermedia systems to different publics. That can be an effective form to create interesting and attractive hypermedia interfaces that could compete with the most popular commercial games on the market. Moreover, more evolved techniques and systematic methods are required for registering the audiovisual data from the physical and psychological

Table 1. Model for analysis of hypermedia interfaces to observe and register the contained aesthetics, narrative elements, type of interactions and ethical or unscrupulous values

1. Name and description of the interfaces and the conjunction of hypermedia expressions	• Corporal appearance and customs
1.1. Identifiable denomination of the hypermedia interface. Each different interface that appears on the hypermedia product should be numbered, named and observed under this descriptive model to obtain a deep analysis	• Morphological defects
2. General characteristics of the interface and detailed description of the multimedia characteristics of the expressions that can allow interaction with any of the narrative elements	• Hereditary aspects
2.1. Software: Group of expressions and technological tools that are used for the relationship and generation of natural and virtual interactions	3.3. Sociological characteristics
A) Of iconic intermediation	• Economic status
B) Symbolic	• Employment
C) Combination of A & B	• Type of education
D) Natural-mimetic	• Life and family relationships
• Opened or virtual reality	• Religion
• Semi-opened or simulators of virtual reality	• Race, nationality
F) Convergent	• Function in his community
G) Pull or push interfaces	• Political tendencies
H) Static or dynamic Interfaces	3.4. Psychological characteristics
I) Mute or sound interfaces	• Sexual and moral life
J) Smart interfaces	• Personal ambitions and motivations
K) The iteration	• Frustrations, main conflicts
2.2. Types of image or perceptive representations	• Temper: angry, tolerant, pessimistic, optimistic, etc.
A) Still image	• Vital attitude: complacent, combative, surrendered
1) Photo-mimetic	• Insecurities: obsessions, inhibitions, superstitions
2) Photo-infographic	• Extroverted, introverted, well balanced
3) Info graphic	• Capacities, aptitudes, languages
B) Still image with sounded image	• Qualities: imagination, criteria, taste, equilibrium
C) Image in movement	• Intellectual coefficient: high, regular, low
1) Cine-mimetic	4. Interactional aspects of the character and type of interaction available: selective, transformative or constructive
2) Cine-infographic	5. Values or spiritual principles and unscrupulous values that available to activate through the interaction with the narrative characteristics of the characters. Values and unscrupulous values that appear potentially related with the interaction developed
3) Cine-mimetic and infographic	5.1. Ethical values
D) Visual image in movement with or without sounded image	5.2. Unscrupulous values
E) Audiovisual image	6. Characterists of the actions represented on the interface and general description of the potential interactions with the actions
F) Sounded image	6.1. Type of structure
G) Sounded image with or without visual image or extraterritorial images	6.2. Secondary theme or subplot
2.3. Hardware: Group of physical expressions	6.3. Changing hierarchy
A) Of intermediation	6.4. Changing hierarchy
B) Natural-mimetic	• Relationships between main and secondary actions
2.4. Typographic description	• Real relationships between main actions
• Size of letter	• Real relationships between secondary actions
• Style of font or type	• Simulated relationships between main and secondary actions
• Characteristics or effects of the letter	• Annulated between main and secondary actions
• Color of the letter	7. Aspects of the interactional actions and type of interaction available: selective, transformative or constructive
2.5. Iconic description	8. Values or spiritual principles and unscrupulous values that available to activate through the interaction with the narrative characteristics of the actions. Values and unscrupulous values that appear potentially related with the interaction developed
2.6. Symbolic description	8.1. Ethical values
3. Features of the characters represented on the interface and general description of the potential interactions with the characters	8.2. Unscrupulous values
3.1. Character or avatar of 1 st , 2 ^d or 3 rd Person	9. Characterists of the spaces represented on the interface and general description of the potential interactions with the spaces
3.2. Physical characteristics	9.1. Natural, constructed, mimetic-natural or mimetic-info graphic
• Sex	9.2. Senses implied in the spatial perception: view, ear and/or touch
• Age	9.3. Implicit space and/or explicit
• Height and weight	9.4. 2D/3D or 4D space
• Hair, eyes and skin colors	9.5. Perspective: size, scale, position and point of views
• Pose	

- 9.6. Focus or defocus
- 9.7. Illumination and color temperature
- 9.8. Props
- 9.9. Protagonist space and/or hyperspace
- 9.10. Absent space or suggested space
- 9.11. Selection space with representation: coincident or different
- 9.12. Hyperspace
- 10. Aspects of the interactional spaces and type of interaction available: selective, transformative or constructive
- 11. Values or spiritual principles and unscrupulous values that available to activate through the interaction with the narrative characters of the spaces. Values and unscrupulous values that appear potentially related with the interaction developed
 - 11.1. Ethical values
 - 11.2. Unscrupulous values
- 12. Characteristics of the time represented in the interface and

- general description of the potential interactions with the time
- 12.1. Order: flashback, flashforward, metaretrospective or meta-prospective
- 12.2. Duration: pure diegesis, impure diegesis, open or close
- 12.3. Frequency: repetitive sequence or singular multiple
- 12.4. Temporal localization: past, present, future, changing or inexistent
- 12.5. Iteration
- 13. Aspects of the interactional times and type of interaction available: selective, transformative or constructive
- 14. Values or spiritual principles and unscrupulous values that available to activate through the interaction with the narrative characteristics of the times. Values and unscrupulous values that appear potentially related with the interaction developed
 - 14.1. Ethical values
 - 14.2. Unscrupulous values

behaviors of the interface users. The multidisciplinary research team Neurocinema, at the University of Aalto, Finland, is a good example. This multidisciplinary group is using fMRI for observing how certain movie sequences and interfaces excite some parts of the brain to create more emotional, perceptual and psychological immersions (Wallenius, 2010). This makes it possible to observe information about how to implement effective communications between the different levels of biological and technological media, within the interactions human-human, human-machine or human-machine-human. It will be also necessary to count on programmers, designers, creators, professors and artists for the optimal production of edutainment video games. Public and private investments and collaborations with more formal research groups and academic programs in the area of interactive media communications, narratives and pedagogy are necessary for establishing a solid interdisciplinary field.

4.2. Educational interactive media in the universities

Currently, there are very advanced informatics systems, generators of artificial intelligence, virtual reality, of real time rendering which have been developed by the video game industries. The commitment of the video game industry with the development of educational games, and the collaborations between cultural and educational institutions, ministries, universities, and others can be a motivation to exchange knowledge and resources. For instance, the University of California San Diego made some agreements with the video game company Sammy Studios and Sony Entertainment, in addition to others, to sell and/or lend the different informatics resources of video game design for the development of scientific and artistic visualizations. There are many new media companies already

willing to establish collaborative bridges for the development of educational applications. The Interactive Media Division, School of Cinematic Arts, University of Southern California, counts on the support of the video game company, Electronic Arts, to develop its Game Lab: a place where professors and students help to innovate and research new video games. For instance, the internationally awarded video game «Darfur is dying» by Susana Ruiz was created there, and served to build on the called «serious games» where the players help the resolution of social conflicts.

Hopefully, more video games and classes based on interactive media systems will be seen, classes that will be more entertaining for the students and a renewal in education for the professors. Institutions and universities such as M.I.T, Massachusetts Institute of Technology, in the Department of Comparative Media, developed educational video games that are good prototypes and examples of the edutainment potential that videogames represent. Games about literature, history, engineering, physics, chemistry and others will fill the classes in the near future, since commercial video games already fill the students' conversations in the present. Henry Jenkins (2007), head of that Department at that time, lead a virtual multiuser environmental space, The River City Project, to study the relationships and learning transferences developed in augmented realities, mixing the context of the classroom and real life. The adjective commercial or popular will be applicable also to edutainment video games, to those that will offer enough quality. This will be possible thanks to the application of models of analysis in hypermedia interfacing, and the increase of research in the area of interactive multimedia applied to multidirectional educational communication. At the end, what is more attractive in education than learning while playing?

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Beyond Newspapers: News Consumption among Young People in the Digital Era

Más allá de los diarios: el consumo de noticias de los jóvenes en la era digital

ABSTRACT

News consumption is undergoing great changes due to the advance of digitisation. In this context, ascertaining the changes in readers' consumption habits is essential for measuring the scope and effects of digital convergence and the outlook for the future. This article aims to analyse this transformation in the specific case of young people's relationship with news reporting. The methodology is based on a quantitative survey of people aged between 16 and 30 (N=549) in order to examine their consumer habits and perceptions. The results show the emergence of social networks as a news medium and the decline of traditional media, and newspapers in particular. However, we observed a high level of interest in news stories and their positive valuation in civic terms on the part of young people. These data also reveal the obvious appeal of cost-free content. Finally, the results highlight the gender gap with men as the greater news consumers, and the impact of age, with news consumption increasing as young people mature. The conclusions of this research suggest that profound changes are emerging in news consumption patterns and the concept of news among young people.

RESUMEN

El consumo de noticias está inmerso en un proceso de grandes mutaciones debido al avance de la digitalización. En este contexto, conocer los cambios en los hábitos de consumo de la audiencia es fundamental para calibrar el alcance y los efectos de la convergencia digital y sus perspectivas de futuro. Este artículo tiene como objetivo el análisis de esta transformación en un caso concreto: la relación de los jóvenes con la información periodística. Partiendo de una encuesta cuantitativa a personas de entre 16 y 30 años (N=549) se examinan sus hábitos de consumo y sus percepciones. Los resultados muestran la emergencia de las redes sociales como soporte informativo y el desgaste de los medios convencionales, especialmente de los diarios. No obstante, se detecta un interés elevado de los jóvenes hacia las noticias y una valoración positiva de las mismas en términos cívicos. Los datos revelan, además, el arraigo de la gratuidad. Finalmente, se constata la existencia de una brecha de género en el consumo informativo, a favor de los hombres, y la incidencia del efecto de la edad, que provoca un aumento del acceso a las noticias a medida que los jóvenes van madurando. Las conclusiones de la investigación sugieren la aparición de cambios profundos en los patrones de consumo y en la concepción de la información por parte del público joven.

KEYWORDS / PALABRAS CLAVE

Media consumption, information, young people, news, journalism, digital convergence, social networks, digital natives. Consumo de medios, información, jóvenes, noticias, periodismo, convergencia digital, redes sociales, nativos digitales.

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1. Introduction

Digitisation has brought changes to the communicative system, with content production, work routines, media and distribution strategies and business models all undergoing important alterations. Public consumption patterns are also transforming and substantially modifying the system's traditional dynamics. In this context, ascertaining the changes in readers' consumption habits is essential for measuring the scope and effects of digital convergence and the outlook for the future, and to that end this article focuses on the analysis of information consumption in a specific age group: young people. They are pioneers in assimilating technological innovations related to digitisation, and for this they are known as digital natives (Prensky, 2001; Palfrey & Gasser, 2008) or members of the interactive generation (Bringué & Sádaba, 2009). Their condition as early users (Livingstone & Bovill, 1999) makes them a privileged case study for exploring the changes that have resulted from the impact of the digital era.

In order to study news consumption in the convergence frame, this article begins with an examination of newspapers which later extends to general information, regardless of format. There are different reasons that justify this choice: newspapers have traditionally been considered the main referent source of information (Corroy, 2008). Moreover, they have been the subject of most investigations focused on the study of the relationship between young people and news (Qayyum & al., 2010), and are undergoing a process of redefinition caused by the current financial crisis (Casero-Ripollés, 2010). However, this article is not just confined to newspapers, as convergence imposes the predominance of interconnections and interdependencies within the media scenario.

The aims of this investigation are:

- 1) To ascertain young people's news consumption habits, particularly of newspaper, in the digital era.
- 2) To discover the attitudes and perceptions of young people towards journalistic information.

The hypotheses of the investigation connected to the above aims are:

- H1. Young people's news consumption goes beyond newspapers, which are read less and less, and encompass a wide variety of media, especially online media.
- H2. Young people show great interest in information, and attribute positive values to it.

2. Literature review

Scientific investigation of young people's news consumption habits has focused mainly on the analysis

of newspapers. These studies have confirmed a consistent decline in readership among this age group, a tendency that began in the mid-Nineties (Lauf, 2001) and which affects most European countries (Brites, 2010; Lipani, 2008; Raeymaeckers, 2004) including Spain. The percentage of young people between 18 and 25 who consume print media is 25.7 (AEDE, 2010). Other investigations also confirm this rift between young people and newspapers in Spain (Navarro, 2003; Arroyo, 2006; Túniz, 2009; Parratt, 2010).

There are many reasons that explain the decline in young people's newspaper consumption: lack of time, preference for other media, and little interest in the content (Huang, 2009; Bernal, 2009; Costera, 2007; Raeymaeckers, 2002). The near irrelevance of news in their daily lives and the lack of a connection to their personal experiences and interests are key factors (Patterson, 2007; Vanderbosch, Dhoets & Van der Bulck, 2009; Qayyum et al., 2010). Young people not only fail to see themselves reflected in newspapers or conventional media (Domingo, 2005), but feel that they are marginal to their agenda setting. In this sense, the invisibility of young people in the news has been verified (Figuera & Mauri, 2010; Kotilainen, 2009) and the negativity that frequently attaches to them has also been confirmed (Túniz, 2009; Faucher, 2009; Bernier, 2011).

All this is matched by the transformation arising from the digital convergence (Islas, 2009) that leads to a multi-screen society (Pérez-Tornero, 2008) which in turn also has an effect. The emergence of windows and news providers promoted by the Internet generate an overabundance of news and strong competition for readers' attention, which also partly explains this phenomenon of decline. Scientific literature also points to parental influence as a significant impact on young people's press consumption (Qayyum & al., 2010; Huang, 2009; Costera, 2007; Raeymaeckers, 2004; 2002).

Young people's news consumption is conditioned by two key factors: the age effect, as people get older they consume more and show greater interest in news (Qayyum et al., 2010; Huang, 2009; Lipani, 2008); the second factor is related to genre. Some authors detect a gap that sees men's consumption become more intense than women's (Brites, 2010; Raeymaeckers, 2004; Navarro, 2003; Lauf, 2001).

The distancing between young people and newspapers has three consequences. Firstly, the decline in young newspaper readers means the loss of an important potential market, and therefore, a fall in circulation and profits (Arnould, 2004). Secondly, the ageing of

newspaper consumers does not guarantee a generational shift in readers (Lauf, 2001). Finally, newspapers have traditionally been considered the primary access point to public affairs (Brites, 2010), and also a socializing agent of politics for young people (Romer, Jamieson & Pasek, 2009). In this sense, the lack of interest in the press could diminish young people's civic consciousness.

3. Methodology

The methodological design of this investigation is based on a quantitative survey. This technique aims to obtain data about objective aspects (frequencies) and subjective aspects (opinions and attitudes) based on the information from individual interviews. The questionnaire is formed of three types of close-ended questions: dichotomous choice, multiple choice and open-ended questions, using a set of values from 0 to 10. The study combines single-answer with multiple choice questions.

The field survey was carried out from January to April 2011. The procedure used was the face-to-face interview method. Subsequently, the data were treated with the statistical program SPSS. Age and genre have been used as dependent variables while consumption and information perceptions are taken to be independent variables. The former include the frequency of reading newspapers, the way they access news, the number of media used to get informed, and payment predisposition. The latter focus on interest in news, and the civic values attributed to it. The study population is made up of 16 to 30-year-olds living in Catalonia (Spain), a segment which numbers 1,284,005 individuals according to Idescat data from 2009. The sample is formed of 549 surveys randomly selected. The genre distribution of the sample is 45.35% men and 54.65% women.

4. Results

4.1. Frequency of newspaper reading

Young people who state that they read the press everyday account for 28.8% of the total (Table 1),

which signifies reduced newspaper consumption among this age group.

The results reinforce the importance of the age effect on newspaper consumption; as readers get older, they mature and their interest in the press rises, hence the increase by 31.3 points between 16-17 year olds and those 23 or older (Table 1). These data demonstrate that as young people get older they acquire a greater need to be informed and a stronger interest in news, and at the same time their cognitive capacity to consume news grows (Huang, 2009). Two factors explain this: young people identify newspapers with the adult world (Raeymaeckers, 2004); young people have a utilitarian view of press – when the topics and content affect them directly they will read them, if not, they will ignore them as they their content and format do not fit their needs and expectations (Vanderbosch, Dhoets & Van der Bulck, 2009). In this sense, most young people associate newspaper consumption to professional activity and their incorporation into the labor market (Lipani, 2008).

The genre variable corroborates that young men read newspapers more than women. The survey shows that 40.6% of men read the press every day, while women register 19% (Table 1), revealing a clear genre gap in newspaper consumption.

4.2. Accessing media

Today's overabundance of information is due to the fact that news is not only provided by newspapers. Young people now have a wide range of media to choose from to get information and the results indicate that they indeed use several platforms to read the news. The use of television (watched by 72.1% of those polled) is significant but secondary to the social networks as a media for news consumption among young people (Table 2). Websites such as Facebook or Tuenti are now the leading information outlets for young people (77.4%), which is especially relevant for two reasons.

Firstly because it verifies that young people's information consumption is increasingly online (Parratt,

	Total	16-17 Years old	18-20 Years old	21-22 Years old	23 or older	Men	Women
Everyday	28.8	10.7	28.5	28.1	42	40.6	19
Several times a week	42.3	26.8	44.8	43.8	42	38.2	45.7
Once a week	12.9	19.6	12.3	13.3	10.2	7.6	17.3
Once a month or more	4.4	12.5	4.7	2.3	1.1	3.2	5.3
Very sporadically	8.2	17.9	7.6	7.8	4.5	5.2	10.7
Never	3.5	12.5	2.2	4.7	0	5.2	2

Table 1: Frequency of newspaper reading per age segment (in %).

2010), specifically via social networks. This predominance of social networks in young people's accessing of news is one of the main contributions of this investigation. This feature also points to a shift in the use of social networks among young people. Until now several studies (Livingstone, 2008; Campos Freire, 2008; Boyd & Ellison, 2008; Carlsson, 2011) have highlighted the preeminently communicative function of social networks as young people use them to get in touch and interact with friends, as well as being a channel for self-expression. These new data show that social networks are now also used as means to read the news.

This change also emphasizes that young people increasingly turn to mass media websites to access news (56.6%), compared to paid-for newspapers (33.2%) and the cost-free press (36.4%). The mobile phone at 28.4%, is yet to consolidate as a window for news consumption among young people (Table 2).

The genre variable also reveals differences in preferences for news media among young people. Men score higher when selecting platforms and devices, except for television, digital tablets and the cost-free press where women score higher (Table 2). Men predominate in the use of social networks and mass media websites for news gathering.

The age variable confirms that the use of all media for news consumption grows as young people mature. Use of paid-for newspapers, radio, blogs, Twitter, social networks, mobile telephone and mass media websites increases as a result (Table 2). By contrast, watching television for news decreases as people get older, confirming the decline in prominence of this audiovisual medium among the young due to the emergence of new media in recent years (García Matilla & Molina Cañabate, 2008; López Vidales, González Aldea & Medina de la Viña, 2011).

4.3. Diversity

The results of our poll reveal that young people use a fairly wide range of mass media to get information, with 73% stating that they frequently use two to three different media to access news (Table 3). These data coincide with the study by Brites (2010: 185) who detected that young Portuguese aged 15 to 17 used an average of three different news sources. So, we can assume that young people's news consumption is not restricted to a single medium, since this habit represents only 6% of the total (Table 3).

This tendency, although not very high as only 4.9% consult more than five different media, shows that there is no longer a cognitive dependence on a single news source.

The reasons behind this remarkably diverse competence among young people to seek out news are numerous: Internet makes access to information easy, the increase in information on offer by the news media system and its sheer diversity. This diversity of news-providing media directly affects the forming of public opinion and its very richness, which is explained by the wide variety of points of view on any event and the elements that enable the reader to form an opinion (Kotilainen, 2009).

In the same way, the range of media used by young people to access news is related to drastic changes in the way they process information (Rubio, 2010). The habit of channel-surfing acquired from TV watching is applied to news consumption in order to get a general impression of current affairs (Costera, 2007). That means an alteration in the traditional order of reading the news, from a linear, progressive reading to a non-sequential, diagonal, interrupted and hypertext reading (Domínguez Sánchez & Sádaba Rodríguez, 2005). The fact that young people use different news sources is connected to the transformation in their

	Total	16-17 Years old	18-20 Years old	21-22 Years old	23 or older	Men	Women
Paid-for print media (newspaper)	33.2	28.6	33.9	32.8	34.1	33.7	32.7
Cost-free print media (newspaper)	36.4	32.1	40.1	33.6	31.8	31.7	40.3
Radio	26.6	17.9	24.2	27.3	38.6	28.9	24.7
Television	72.1	80.4	74	71.1	62.5	71.5	72.7
Website (mass media)	56.6	44.6	51.3	60.2	76.1	65.5	49.3
Blog	3.3	0	3.2	3.9	4.5	3.6	3
Social network (Facebook, Tuenti, etc.)	77.4	75	76.2	75	86.4	82.3	73.3
Twitter	17.1	5.4	18.8	18	18.2	19.3	15.3
Mobile Telephone	28.4	10.7	24.9	35.2	40.9	30.9	26.3
Digital Tablet (iPad, etc.)	0.7	1.8	0	2.3	0	0.4	1

Table 2: Preferred media for news consumption (multiple choice response in %).

	Total	16-17 Years old	18-20 Years old	21-22 Years old	23 or older	Men	Women
One	6	12.5	6.9	3.9	2.3	5.6	6.3
From 2 to 3	73	82.1	71.5	78.9	63.6	65.5	79.3
From 4 to 5	14.8	3.6	15.9	12.5	21.6	20.1	10.3
More than 5	4.9	0	4.7	3.9	10.2	7.6	2.7
None	1.3	1.8	1.1	0.8	2.3	1.2	1.3

Table 3: Number of different mass media used on a frequent basis to get the news (in %).

information consumption habits (Qayyum & al., 2010).

Age again turns out to be a decisive factor with regard to the plurality of news sources used by young people. The highest proportion of young people who use just one media outlet to check the news date is the 16 and 17 year old age group (Table 3). Moreover, none in this group uses five or more platforms for information consumption, the total opposite to the group of 23 year olds or older. Men are more diverse in the use of media than women (Table 3).

4.4. The consolidation of cost-free content

The results reveal that almost all young people are reluctant to pay to access information on the Internet. A total of 93.8% opposed paying for news with their own money (Table 4), demonstrating that the idea of cost-free content consumed online is deeply ingrained in young people. Only 6.2% said they would pay for news. This resistance to paying for information is also common in the rest of the population. Different studies register between 10-20% the number of people willing to pay for news (WAN, 2010; PEJ, 2010).

Although the refusal to pay diminishes with age, the percentage of 23 year olds or older willing to pay for news online is still small, representing only 9.1% (Table 4). Regarding the genre variable, the number of men in favor of paying is slightly higher than that of women, 7.6% against 5% (Table 4).

The deep-rooted support for cost-free content is demonstrated by the 76.3% of young people who say

they would switch to another free access medium if their favorite web site charged for news (Table 5). In fact, cost-free access has become a powerful factor conditioning young people's consumption of information on the Internet, with 17.1% of the sample stating that they would stop consuming news altogether if they could not find a free news outlet online (Table 5).

4.5. Interest in information

Finding out the attitudes and perceptions of young people towards news is essential for determining their information consumption. Young people's interest in news registers an average of 7.51, on a scale of 0 to 10 in our survey (Table 6). Therefore, we can deduce

	Total	16-17 Years old	18-20 Years old	21-22 Years old	23 or older	Men	Women
Yes	6.2	3.6	4.3	9.4	9.1	7.6	5
No	93.8	96.4	95.7	90.6	90.9	92.4	95

Table 4: Willingness to pay to access news on the Internet (%).

ce that the low level of news consumption among the young, particularly newspapers, does not reflect apathy towards current affairs. On the contrary, young people have a considerable appetite for news and low consumption has nothing to do with indifference, rather dissatisfaction at the way information is presented, especially in the conventional media (Costera, 2007; Túnéz, 2009; Huang, 2009; Raeymaeckers, 2002). This partly explains why young people tend to use other media, such as social networks, to get information, and have largely abandoned the print media (Lipani, 2008). Newspapers have not adapted to the interests and needs of their younger readers and are no longer considered a primary source of information by young people (Corroy, 2008).

The age effect is again evident as interest in news

among young people rises remarkably as they enter adulthood. The genre variable is a paradox for as the previous data (frequency of reading, number of

	Total	16-17 Years old	18-20 Years old	21-22 Years old	23 or older	Men	Women
Pay to access information	6.6	1.8	6.1	8.6	8	7.6	5.7
Consult other cost-free mass media websites	76.3	75	77.6	72.7	78.4	70.7	81
Stop consuming information on the Internet if I cannot find cost-free websites	17.1	23.2	16.2	18.8	13.6	21.7	13.3

Table 5: Reactions to having to pay to access news on their favorite media web site (in %).

media used or willingness to pay) point out, men consume more information than women yet women

	Total	16-17 Years old	18-20 Years old	21-22 Years old	23 or older	Men	Women
Average	7.51	6.46	7.52	7.52	8.11	7.43	7.57
Deviation	1.54	1.44	1.52	1.4	1.51	1.67	1.41

Table 6: Degree of interest in information (on a scale of 0 to 10).

declare a greater interest in news than men. The difference is small, 7.57 against 7.43 (Table 6), but noteworthy, and something similar occurs with regard to the civic importance attributed to news (Table 7).

Young people also place a high civic value on information. On a scale of 0 to 10, young people give an average 8.2 to the fact that being well-informed enables you to participate in politics and be a good citizen (Table 7). Young people acknowledge that the availability of news is important for democracy and information enables and guarantees public debate and the development of a civic consciousness. Being well-informed is to be a fully active and responsible citizen, and news plays an important role in the civic and political socialization of young people (Romer, Jamieson & Pasek, 2009); young people have a positive concept of news, and although they are turning their backs on conventional media, they continue to value information.

5. Discussion and conclusions

The results allow us to verify the two hypotheses presented at the beginning of this article. The data demonstrate that young people's news consumption is oriented towards new media, especially social networks, while newspaper readership among young people is in decline (H1). As a consequence, newspapers are no longer the primary source of information in the digital context (Lipani, 2008), which does not mean that the appetite for news among young people has diminished, quite the contrary, interest in information is strong and news consumption scores highly as a civic value (H2).

The data also reveal the diversity of news sources consulted to get information. News consumption is now a multiple media habit; each medium has a different level of prominence with news content subject to the effects of multiplatform distribution and the synchronic consumption habits of a younger generation able to perform various media activities simultaneously thanks to their multitasking skills (Micó, 2012; Van Dijk, 2006).

The data also reveal the deep-rooted habit of cost-free news access among the young. This is a serious problem for the paid-for media, and newspapers in particular, as it seriously affects the business model (Casero-Ripollés, 2010).

This investigation verifies the effect of age regarding young people and news. The frequency of information consumption and interest in news increase as younger readers mature. The great unresolved question for newspapers is whether this increase in news consumption will be enough to guarantee a minimum readership in the future, a question currently posed by many authors (Huang, 2009; Lauf, 2001).

The genre variable reveals a paradox in that men consume more news but women value information more positively in terms of interest and civic importance.

The results of this survey also throw up new questions concerning young people's consumption of information that will require further investigation. The two major questions are: the transformation in news consumption arising from young people's preference for social networks as information media. Many authors point out that information consumption on the Internet is no longer a preferential activity because young people rarely search for news in an active way (Qayyum & al., 2010), rather they access it if the news story attracts their attention while they surf the Net. Instead of a deliberate, conscious, routine search, news consumption has changed and is now based on chance and coincidence (Patterson, 2007). This results from the way young people use the Internet; just as they use the Internet for social interaction (Carlsson, 2001) and entertainment (Vanderbosch, Dhoets & Van der Bulck, 2009), they also use this technology in a recreational (Tully, 2008) and utilitarian way (Rubio, 2010), and so information loses its prominence. This has enormous consequences for newspaper distributors and the rest of the news media.

The second question relates to changes in the conception of news among young people. The results suggest that this is due to the emergence of a conception of news as public service rather than product, al-

	Total	16-17 Years old	18-20 Years old	21-22 Years old	23 or older	Men	Women
Average	8.2	7.57	8.37	8.13	8.19	7.97	8.4
Deviation	1.62	1.81	1.64	1.52	1.48	1.79	1.44

Table 7: Level of importance given to the fact that being well-informed enables participation in politics and being a good citizen (on a scale of 0 to 10).

though this change is gradual. Therefore, information has to be freely available at any time like, for example, the public health service (Costera, 2007). Accessibility becomes a key factor, as young people demand quick and easy access to information.

Finally, another interesting strand is that young people start to see information as lacking in value, worthless in that being cost-free devalues the journalistic credibility of the product. This opens a great many questions about the future of journalism that will need to be studied in depth in future investigations.

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Synchronous Virtual Environments for e-Assessment in Higher Education

La e-evaluación de aprendizajes en educación superior a través de aulas virtuales síncronas

KEYWORDS / PALABRAS CLAVE

This research studies an assessment system of distance learning that combines an innovative virtual assessment tool and the use of synchronous virtual classrooms with videoconferencing, which could become a reliable and guaranteed model for the evaluation of university e-learning activities. This model has been tested in an online course for Secondary School Education Specialists for Spanish, Portuguese and Latin American graduates. The research was designed from a qualitative methodology perspective and involved teachers, students and external assessors. During the whole process great care was taken to preserve data credibility, consistency and reliability, and a system of categories and subcategories that represents online assessment has been developed. The results confirm that we have made considerable progress in achieving a viable, efficient and innovative educational model that can be implemented in Higher Distance Education. Also, videoconferencing and synchronous virtual classrooms have proved to be efficient tools for evaluating the e-assessment method in virtual learning spaces. However, we need to keep testing this model in other educational scenarios in order to guarantee its viability.

RESUMEN

En el presente trabajo de investigación se somete a estudio un sistema de evaluación de los aprendizajes en enseñanza a distancia en el que, combinando un tipo de evaluación virtual pedagógicamente innovadora y el uso de aulas virtuales síncronas, con videoconferencia, pueda acreditarse un modelo fiable y garante de evaluación de los procesos de enseñanza/aprendizaje para actividades de e-learning universitarias. El modelo se ha probado en un curso online de Especialista en Educación Secundaria dirigido a titulados universitarios españoles, portugueses y latinoamericanos. Desde una perspectiva metodológica cualitativa, se diseñó una investigación cuyos participantes han sido el profesorado y el alumnado protagonistas de la formación, así como evaluadores externos. Durante todo el proceso se han cuidado especialmente los aspectos relacionados con la credibilidad, consistencia y confirmabilidad de los datos obtenidos, extrayendo de modo inductivo un sistema de categorías y subcategorías que representan la evaluación de los aprendizajes en procesos formativos online. Los resultados confirman que se ha avanzado en la consecución de un modelo innovador de e-evaluación viable, eficaz y que garantiza su aplicación en enseñanza superior a distancia. Asimismo, el uso de videoconferencias y de las aulas virtuales síncronas para realizar entrevistas de e-evaluación ha resultado ser un instrumento eficaz en espacios virtuales de aprendizaje. De cualquier modo, se evidencia la necesidad de continuar experimentando este modelo en otros escenarios educativos.

ABSTRACT

E-learning, e-evaluation, assessment, videoconferencing, higher education, teaching method innovations, synchronous environments, qualitative research.

E-learning, educación virtual, e-evaluación de aprendizajes, videoconferencia, educación superior, innovación pedagógica, aulas síncronas, investigación cualitativa.

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1. Introduction

There has been a remarkable increase in international studies on formative assessment, and the concept of assessment has aroused interest not only from a pedagogical point of view, but also from the strategic and even economic perspective, leading to a redefinition of the concept.

In our study we focus on online formative assessment, and our initial research reveals elements that are identical to those found in any assessment method and which have to be contextualized according to the specific learning situation to be observed, measured and improved. In their studies, Gikandi, Morrow & Davis (2011) state that assessment (whether formative or summative) in online learning contexts includes characteristics that differ from face-to-face contexts, especially due to the asynchronous nature of the participant's interactivity, which means that educators must rethink pedagogy in virtual settings in order to achieve effective formative assessment strategies.

As we pointed out in a previous analysis (Blázquez & Alonso, 2006), prior to 2005 the most common topics in e-learning settings were the categorization of formative and summative assessments (Birnbaum, 2001; Wentling & Jonson, 1999), models such as the Input-Process-Output Model (Mehrotra & al., 2001) and others with similar elements (Stufflebeam, 2000; Rockwell & al., 2000; Potts & al., 2000; Forster & Washington, 2000; Moore & al., 2002).

More recent studies have focused on formative e-assessment which, as Rodríguez & Ibarra (2011:35) point out, «relies on the open, flexible and shared conception of knowledge, emphasizing the use of assessment strategies that promote and maximize the student's formative opportunities». In this sense, Oosterhoff, Conrad & Ely (2008) stress the importance of formative assessment in online courses. In our context, Peñalosa (2010) states that to identify the progress of interactive and cognitive processes in formative virtual settings it is necessary to formulate a valid, sensitive strategy to assess performance, together with a series of tools that enable us to identify changes in the complexity of knowledge-building on the part of the students.

Weschke & Canipe (2010) present assessment guidance aimed at teachers, in which they highlight an interactive assessment process that uses indicators such as assessment of student courses, self-assessment, submitted activities and rubrics, all of which makes cooperative assessment more valuable for professional development.

More recent studies present two innovative tools for the assessment of virtual settings: eRubrics and

videoconferences. Serrano & Cebrián (2011) are developing an eRubric system in Higher Education in which the student becomes the main assessor of the process. This implies a methodological change in the conception of the e-assessment agent who by tradition has always been the teacher. Regarding the use of videoconferencing, Cubo et al (2009) urge the installation of Virtual Synchronous Classrooms as learning environments in Spain, and Cabero & Prendes (2009) pointed out that initial assessment (debate on previous knowledge), processual assessment (monitoring the students' interaction) and final assessment (oral presentations, oral exams...) could all be done via video-conference.

We consider it necessary to continue with the innovative educational proposal, since it is the formative methods and strategies that will establish the use of technology and not the other way round since, as Sancho (2011) states, technology in itself does not entail formative innovation and it can even reinforce conservative behaviour and discourage participation. E-learning is enabling teacher and students to explore new formative and collaborative methods with the flexibility that conventional educational structures are unable to offer.

Our interest in trying out an innovative formative e-assessment system led our research team to design a specific proposal for an online Secondary Education Specialist course aimed at graduates from Spanish, Portuguese and Latin American universities wishing to train as secondary education teachers. Our virtual learning proposal considered an environment that was designed to be flexible, based on access to original and varied sources, and with the students as active participants in their own training, accompanied by a team of coordinated and inter-functional teachers who shared responsibility for the process both individually and in a group setting. In this process the interaction formulas were negotiated and priority was given to problem solving, alternating individual and collaborative work, and offering a rich diversity of materials (media) and continuous formative and comprehensive assessment with dialogue as the main premise.

Throughout the course, the aim was for students to acquire the knowledge and skills necessary to reflect, analyze and criticize the main contents that shape the formative aspects of a secondary or middle school teaching in different Western countries and train them to carry out their functions at that level of education.

The constructivist approach implemented in the course was based on a virtual training design executed

in the Moodle platform that combined a learning activity that fostered collaborative work with cooperation among students and between students and teachers. One of the training focal points was the learning and support-mentoring model. The tutor was responsible for the entire training process and assessment of the student who in turn received input from specialist teachers and continuous and distance assessment reinforced by self-assessment, co-assessment and interviews via videoconference.

The assessment and qualification system proposed for the course is a flexible model, adapted to the circumstances of the course and the students, where learning was assessed throughout the training process itself and included online tasks which were evaluated from the perspective of individual and group learning. All this was embodied in individual activities, collaborative activities, a final monograph project, interview via videoconference and in other issues such as active and quality participation.

For the interview via videoconference as assessment element, we used Adobe Connect's Synchronous Virtual Classroom whose functions include, among others, online and live conferences between users. The meeting room includes several visualisation panels (pods) and components, and also allows several users, or meeting attendees, to share computer screens or files, chat, transfer live audio or video and participate in other interactive activities online.

With this context and the pedagogical experience stated, we aimed to carry out research to develop and check the viability of a formative assessment system for reliable online teaching with knowledge accreditation guaranteed, without the need for the physical presence of the higher education student. At the same time we aimed to:

- Collaborate in the innovation and development of e-learning as an educational change agent, particularly in line with the proposals for the European Higher Education Area.
- Experiment with the suitability of the Moodle open software platform for the students' individual and collaborative work and for the final interview via videoconference as part of the online assessment we are testing.

2. Materials and methods

The study examines assessment in virtual learning settings within a specialist university course for students who want to train as secondary education teachers. The distinguishing feature of the course for the students, together with the singularity of the proposed methodology and assessment evaluation), is the basis of the qualitative research proposal; as Rodríguez, Gil & García (1999) assert, it is about studying reality in its natural context to give meaning or interpret the phenomena according to the meanings they have for those involved. This study aims to give special meaning to

We must use these technologies to innovate and not to repeat ineffective traditional models, misusing synchronous resources (such as videoconference) at the expense of asynchronous resources (website, e-mail, discussion forums, etc.).

the subjective aspects of the actors of the action, and is interested in the impressions and observations of the participants who can deduce the theories inductively.

Following Rodríguez, Gil & García (1999), the research has been developed in four stages: a preliminary stage, fieldwork, an analytical stage and a informative stage. In this section we will describe the preliminary stage and the fieldwork with the results and discussion to follow.

- Preliminary stage: This stage is developed out of the research's conceptual theoretical framework. The field to be studied is defined in this stage, together with the different stages of the qualitative research design and the description of the object to be studied, the triangulation, the data collection tools and techniques along with the analysis to be developed.
- Field work: This was the data collection, which was carried out at the beginning of the specialist course and after it had finished.

2.1. Participants

- Teachers or tutors are essentially characterized by their university and psycho-pedagogical training, so they are particularly familiar with teaching/learning models. There were eight participants.
- The students were graduates who had gained a

variety of university degrees and who wanted to obtain a diploma to certify their psycho-pedagogical knowledge and training to educate secondary school students. Twenty students participated.

- The group of experts was made up of four teachers, highly specialised in teaching/learning systems. Three were specialists and members of distance learning institutions, two of whom were from the Open University (United Kingdom) and a third was from the UNED (Spain). The fourth member is a renowned Spanish expert in virtual training.

2.2. Rigorous methodology

A constant throughout the process has been the rigorous methodology in the design and development of the study. This enabled us to generate evidential data,

Time	Technique	Source
At the beginning of the training	Focus group	8 Teachers-Tutors
	Interviews	4 Experts
After the training	Interviews	1 Student
	Questionnaire	17 Students
	Focus group	8 Teachers-Tutors

Table 1. Times, techniques and research sources.

i.e., consolidate the research's rigour and relevance. To do so we controlled the four concepts that according to Rodríguez, Gil & García (1999) are essential: credibility, transfer, consistency and validation.

3. Results

3.1. Data synthesis

To divide this study into units we followed a thematic approach that considered talks, events and activities taking place in the same situation studied and the possibility of finding segments that speak about a similar subject. This procedure enabled us to synthesize and create group units of meaning that match the study objectives.

For the identification and classification of items we devised a system of categories and sub-categories following a deductive-inductive classification. Deductively, since it was based on a previous research study (Alonso & Blázquez, 2009) that helped define the initial macro-categories. Inductively, because we then proceeded to devise new codes, categories and sub-categories from the recorded data. The final category system is described below (the sub-categories that arise from the study are described in Table 3):

3.2. Disposition and data transformation

For this stage we used the NVIVO qualitative data analysis software, which made the coding and analysis of the transcriptions or documents much easier. It helped us to store, organize and extract summarized reports of the most significant data emerging from the analysis, in addition to combine two dimensions in our analysis by integrating a narrative perspective and a more analytical one.

In this phase of the analysis process the results in Figure 1 are presented by category and technique, indicating which category was addressed in each technique and if the assessment was positive or negative:

Results that answer the data in Figure 1 are:

a) **Open questionnaire for the students.** In the General Aspects of the Assessment (GAA) category, the students surveyed (15 of the 17 questionnaires analyzed) were pleased overall with the type of assessment proposed: «From my point of view, the assessment includes all four dimensions of the assessment process, that is: prior design of the criteria, a comparison of information to obtain a balanced judgment, a decision-making process and the communication of results» (student).

Some students suggested changes in the qualifica-

Criteria	Strategies	Study actions
Credibility	Prolonged presence in the field	During the whole formative process until reaching data saturation.
Transfer	Abundant descriptions of the scenarios	The scenario has been described in detail so that other researchers can use the study to compare it to similar scenarios.
Consistency	Overlapping methods	Tools (interviews, questionnaires and focus group) and sources (students, teachers and experts) have been triangulated.
Validation	Systematic negotiation among researchers	Weekly meeting of three researchers throughout the process, the results of which they independently encoded and shared among them to negotiate and reach consensus on codes, relationships and results.

Table 2. Criteria, strategies and study actions to guarantee a rigorous methodology.

tion system motivated by purely subjective aspects. They define assessment as follows: «Continuous training has been very good and we have been able to discuss and develop it with thematic forums for each issue. The activities proposed and implemented have been useful to consolidate the acquired knowledge or to work with it in a slightly more practical way, not so theoretical. With the final project, we have been able to work with that acquired knowledge, while we have studied it more in depth and through which we have

been able to demonstrate it, as with the final interview» (student, questionnaire).

Regarding the Assessment of Individual Activities (AIA), 12 of the 17 students surveyed valued these activities very highly for enhancing the teaching-learning process and, therefore, the assessment: «With the completion of activities you learn a lot, because to be able to carry them out you must study and understand the theory and then put it into practice. And that is how you best learn the content» (student).

CAT	SUB-CAT.	DESCRIPTION
GAA	Formative	Assessment that provides help according to the obstacles and needs that are encountered throughout the e-assessment process.
	Reliability	Assessment that truly considers what the students have learnt with the online training.
	Motivation	E-assessment involves a continuous process that stimulates the student to improve throughout the learning process.
	Qualification criteria	E-assessment adapts coherently to the educational goals proposed for the students.
	Innovation	Assessment that involves a systematic improvement and an educational transformation regarding the methods, materials, working behaviours, etc.
AIA	Learning	To what extent the assessment of requested individual activities has encouraged learning.
	Competences	To what extent the assessment of the individual activities requested from the students has contributed to the progress of knowledge, abilities, attitudes, etc.
	Continuous assessment	To what extent the assessment of the individual activities requested from the students has been part of a continuum.
	Individual participation	To what extent the individual participation in the assessment of the requested individual activities has had an influence.
AGA	Learning	To what extent the assessment of requested group activities has encouraged learning.
	Competences	To what extent the assessment of the group activities requested from the students has contributed to the progress of knowledge, abilities, attitudes, etc.
	Continuous assessment	To what extent the assessment of the group activities requested from the students has been part of a continuum.
	Group participation	To what extent the group participation in the assessment of the requested individual activities has had an influence.
AVID	Learning	To what extent the assessment via videoconference is considered suitable for the learning process.
	Competences	To what extent the assessment via videoconference has contributed to the development of competences for individual and collaborative work.
	Videoconference	To what extent is videoconference considered suitable as an online assessment modality.
	Students participation	To what extent does the students' involvement, individually and in group, influence the videoconference assessment.
TOO	Information on the tools	This refers to whether prior training has been required for the use of the different tools before being used.
	Synchronous	Use of synchronous tools (chat, videoconference, instantaneous messaging, virtual classroom survey, etc.) to contribute to the assessment process.
	Asynchronous	Use of asynchronous tools (message boards, questionnaires, etc.) to help the assessment process.
	Platform	Use of the virtual platform's assessment system.

Table 3. Description of the sub-categories developed as a result of the study.

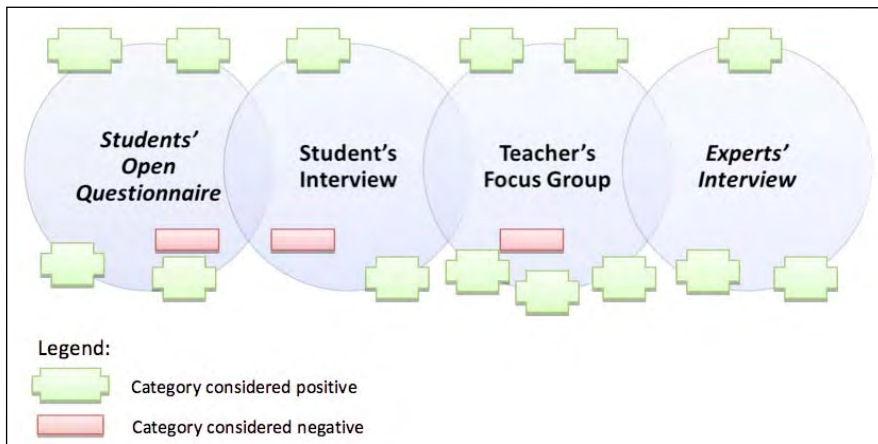


Figure 1. Category addressed in each technique and its value.

Likewise, there are many references in the text in relation to continuous assessment, with students especially valuing this point (all 17 course students). In fact, this is why most of them consider it a good assessment system: «Overall I thought it was a good assessment system, taking into account the course's characteristics. The system used has made us work on the content on a daily basis. With the individual and group activities, and participation in the forums, you can achieve such a goal» (student).

The students generally consider the individual activities requested by the teachers as a very effective tool to ensure the quality of the course's assessment system. As for the Assessment of Group Activities (AGA), students mainly ignored this category, but those who answered (3 out of 17) were very positive in their judgment, as one student says: «With the final project I was able to consolidate the contents dealt with on the course, and to study in depth other related issues».

The students know that these activities do not work on their own and they point out as positive aspects both the maintenance of the platform where the activities were found and the tutoring by the course teachers-tutors.

In relation to the tools used for the videoconference (AVID), the students said their experience of the forums was positive, and the tools themselves were highly rated; once again they emphasized the continuous feedback from the teachers-tutors. Regarding the Assessment via Videoconference category, students want more eye contact throughout the course, with occasional videoconferences every so often.

b) Interview with a course student. In the assessment of Individual Activities Requested from the Student (AIA), the interviewee appreciates the fact

that more value or weight is given to the activities since she considers that «it is the best way to learn».

As for the Assessment of Group Activities (AGA), the online chat experience was not rated very highly because the students found it difficult to establish effective written

communication, and so the tool was not well-received. In Assessment via Videoconference (AVID), the student addressed the assessment issue to ensure that the person behind the screen and the person carrying out the exercises was really the person studying for the diploma, which is closely related to the reliability sub-category of General Aspects of the Assessment. In a very subjective manner the student says: «In my case the grade obtained is reliable, but I do not know if some people could be cheating, I hadn't even thought about that. Yesterday I told my grandmother, that somebody could do another person's exercises, but maybe I am not very clever and had not thought of that».

c) Focus group. In our analysis of the two focus groups set up with the course teachers-tutors the teachers rate the course highly in terms of the General Aspects of the Assessment (GAA). A recurring topic was that of assessment criteria, namely the percentage allocation criteria, as several of the teachers (6 out of 8 teachers-tutors) believe that the individual activities should have more weight due to the work done by the students and their personal participation.

Regarding the Assessment of Individual Activities Requested from the Student (AIA), the teachers-tutors admit that these activities enabled them to make a more accurate assessment, since they helped them to get to the students they were evaluating: «What happens is that on a course like this, with so few students, and intense supervision, the assessment has been continuous. We carried out an extremely accurate assessment of who they were, what they were doing, why they were not doing it, why they were late submitting the activities» (course teacher-tutor).

As for the Assessment of Group Activities (AGA), the views varied: 60% of the teachers argue that no

work was carried out 100% collaboratively, because the students simply divided up the work and then joined it together. Other teachers-tutors, however, stated that the group activities had truly given them the criteria to get to know the students better and evaluate them.

In Assessment via Videoconference (AVID), we found that some teachers (2 of the 8 tutors) were reluctant to use the videoconference systems. «They are not reliable, at least not for me (...) in my case, the entire course went great, but as I was telling tutor 2, for me the assessment... in fact, I had only two students, because two left, one via webcam, the other via telephone. The one over the phone, I questioned him about activities, about the subject, to see what had been done and how. Well, imagine when he could not answer me directly because the communication kept cutting off, and I called again and asked the same question. And with the webcam, exactly the same, it didn't work...» (teacher-tutor). However, another group (65%) was inclined to use the videoconference systems as a communication and assessment tool, and were very satisfied with this completely virtual experience since they were able to accredit the knowledge acquired, emphasizing the need for more virtual interviews during the course.

Finally, the teachers said that this course had been the most innovative they had worked on, despite the need for more work to be done on certain pedagogical aspects.

d) Interviews with experts. Experts provided information on three of the categories, first on the Assessment of Individual Activities Requested from the Students (AIA), where they emphasize the importance of continuous assessment: «I think a continuous assessment of the individual and group contributions is essential in these settings» (assessment expert).

As for the Assessment of Group Activities Requested from the Students (AGA), the experts focus on the need for a good online chat system for synchronous communication and even for the final assessment.

In the Assessment via Videoconference (AVID), one of the experts focused on its reliability: «Many times in a face-to-face setting we tell the students to start creating an electronic portfolio, in the end they will submit a project or a research report. What we know is that the students have given it to us physically, but we don't have the mechanism, we have it when we are talking to them. This can be done online, but you have to find another criterion and the criterion is that the student-tutor ratio cannot be very high» (expert). In addition, another expert clarifies that «If

you are doing an online course properly you know your students well, and it would be impossible for them to 'cheat' in their work. The important thing is that if it is well-designed I assure you they do not lie» (expert).

Finally, experts have also called attention to the need to establish coherence between the training model and the assessment system, so that the necessary means to enable online and distance assessment are arbitrated whenever the formative model follows these parameters.

4. Discussion

In this study we have presented an online assessment model that does not require the presence of the students, based on a constructive consideration of knowledge where learning can and should be assessed and evaluated throughout the training process itself, with tasks that can be assessed from the perspective of individual and group learning. The assessment of this study has helped us establish the following conclusions:

1) Progress has been made in achieving an innovative model for feasible and effective e-assessment, which ensures its use in distance higher education, which is valued as a highly beneficial contribution for those following e-learning models anchored in standard summative assessments, arising from traditional teaching processes.

2) It can be asserted that the assessment we propose is formative: it is part of a process and enables improvement throughout. We therefore follow the line of argument of Rodríguez & Ibarra (2011) who defend that e-assessment must be a learning opportunity designed to improve and promote meaningful learning and which is currently not employed in universities because their system continues to place emphasis on the teachers' workload rather than in the students' learning.

3) Most students consider the assessment followed as a highly motivating method since, in addition to the different techniques and tools used, the assessment is considered to be part of the teaching-learning process and not only an activity that takes place at the end of the course.

4) According to the degree of satisfaction of the students, experts and teachers, the results show that progress has been made in several key directions for a much more active teaching that relies less on memory and is more focused on the students' workload and, importantly, with an assessment model that does not require a face-to-face setting. This corroborates the

contributions made by Sloep & Berlanga (2011), who propose the creation of learning networks beyond the universities' borders.

5) The results of this study bring together teaching innovation intended for universities with e-learning as agent for educational change. The use of interviews via videoconference is the most significant innovation in our study, although it could be improved as an assessment method since it still generates insecurities when used as an assessment tool. However, the experience is considered highly positive and, although we must continue to sharpen the technique, it seems we are on the right track. As suggested by Blázquez (2004) we must use these technologies to innovate and not to repeat ineffective traditional models, misusing synchronous resources (such as videoconference) at the expense of asynchronous resources (website, e-mail, discussion forums, etc.).

6) The formative assessment model tested provides regulated university activities for students who are unable to attend face-to-face final exams due to reasons of distance, which points to a huge potential educational market for our universities, especially in Latin American countries.

7) As noted by Solectic (2000), the specificity of the teaching materials demands a series of activities that help students put their resources, strategies and skills into practice, and which encourage them to participate in the knowledge-building process. This, from the beginning, was the purpose of the individual activities and, as we have established, the students have also understood individual activities in the same way, since they receive the highest rating as a continuous assessment standard.

8) In general, the implementation of this online assessment method has been positive, especially when focusing on continuous assessment throughout the activities, projects and interviews (via videoconference), together with a tutorial model that ensures the supervision of the student's learning progress, enhanced by a manageable ratio of five students per tutor. In turn, this is reinforced by the distinctiveness of the pilot scheme in which the teachers were selected for their desire to participate and motivation.

9) There is always scope for improvement, with minor changes concerning the flexibility of the assessment activities and the singular valuation of collaborative activities, which have to go beyond simple task distribution. An increase in the number of interviews should also be encouraged, which in turn will give teachers greater confidence when dealing with Synchronous Virtual Classroom technology.

10) We conclude by pointing out that, based on qualitative transfer criteria, we encourage the teaching community to build similar scenarios to implement formative e-assessment processes and to follow the principles presented in the study.

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Value of Audiovisual Records in Intercultural Education

Valor de los registros audiovisuales en educación intercultural

ABSTRACT

This article discusses the possibilities of audiovisual records as research data in intercultural relationships, or those that allow us to understand the Other. The research aims to contribute to the theory that is being developed on the nature and value of narratives in photographic and video representation and analysis of basic realities of teaching that are difficult to capture and quantify. Specifically, we examine whether audiovisual recording is a good tool for gathering and analysing information about intentions and interpretations contained in human relationships and practices. After presenting some epistemological and methodological dilemmas such as the crisis of representation in the social sciences or the «etic-emic» conflict and proposing some solutions taken from audiovisual anthropology, we analyse the nature of intercultural relationships in two schools –ethnographies– that support the study completed in 2011 and funded by the Spanish Ministry of Science and Innovation: the use of visual narratives as a substrate of intercultural relationships between culturally diverse kindergarten and primary education pupils. As an example, we describe how we discovered some categories that allow us to understand the universe of meanings that make sense of, determine and shape their cultural relations. Finally, we describe the contributions of NVivo 9, a software package that facilitates the analysis of photo and video recordings and narratives.

RESUMEN

Este artículo analiza las posibilidades de los registros audiovisuales como datos en la investigación sobre relaciones interculturales, o aquellas que van dirigidas al conocimiento del otro. Pretende contribuir a la teorización sobre el valor de las narraciones fotográficas y videográficas en la representación y análisis de realidades de la enseñanza que son difíciles de captar y cuantificar. Concretamente, estudiamos si el registro audiovisual es una buena herramienta para recoger y analizar información situada sobre las intenciones e interpretaciones contenidas en las relaciones humanas. Después de presentar algunos dilemas epistemológicos y metodológicos, como la denominada crisis de la representación en ciencias sociales o el conflicto «etic-emic», y de plantear algunas soluciones dadas desde la antropología audiovisual, analizamos la naturaleza de algunas situaciones de educación intercultural recogidas en los dos colegios –etnografías– que soportan el estudio finalizado en 2011 y financiado por el Ministerio de Ciencia e Innovación de España, sobre el uso de narraciones audiovisuales como sustrato de las relaciones entre el alumnado diverso culturalmente de educación infantil y primaria. A modo de ejemplo, describimos cómo hemos llegado a algunas de las categorías o constructos que llevan a entender el universo de significados que dan sentido a la vez que condicionan y configuran las relaciones interculturales de esos centros. Finalmente, describimos las aportaciones de algunas herramientas del software NVivo 9 en el análisis del contenido de registros y narraciones foto-videográficas.

KEYWORDS / PALABRAS CLAVE

Intercultural education, audiovisual anthropology, case study, audiovisual narratives, collaborative learning, audiovisual recordings.

Educación intercultural, antropología audiovisual, estudio de casos, narrativa audiovisual, aprendizaje colaborativo, registros audiovisuales.

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1. Introduction

Research since the 1980s on teaching processes has revealed the dilemma addressed in this article: the existence of intangible situations that are not only unquantifiable but also difficult to convey in words. This is the case of intercultural relations, where it is essential to know people's location and movement, together with the feelings of rejection and exclusion sometimes experienced by immigrant schoolchildren. Such situations, as in the sphere of Intercultural Education, become complicated when those involved in the teaching processes do not know the language of the receiving country or they are not sufficiently fluent in it, such as in the case of kindergarten pupils.

This is a dilemma that has accompanied one of the greatest epistemological crises of the late 20th century, known as «the crisis of representation» (Rorty, 1983; Gergen, 1992; Crawford & Turton, 1992; Shotter, 2001), which questioned the foundations of objectivity made from the standpoint of Cartesian rationality based on the premise that the human mind showed the truth of reality by its representation using language. This cornerstone of objectivity was questioned by the absence of personal and contextual referents of the people making that representation.

One of the approaches for dealing with the dilemma and leaving behind this crisis situation was put forward by Anthropology, which proposed to address study situations by using narratives that provide spatial and temporal contextual elements of the action or event, and the personal context of the observer/narrator in order to be able to facilitate an understanding of the event or field of study. In this sense, the researcher is not permitted to speak on behalf of the participants and describe their behaviour and relationships using the researcher's own cultural and scientific framework as reference – the «emic/etic» dilemma. Additionally, in Intercultural Education the underlying principle of «knowledge of the other» contributes to understanding of and affection for different Others, as when they start to form relationships they get to know each other and then start to love each other. However, to understand a personal action or social event, we need to know the intention of the person who is acting in this way as well as the interpretation or meaning given to those actions by the person on the receiving end of them (Mead, 1982; Blumer, 1982; Schutz, 1974; Berger & Luckmann, 1986). From the approach of symbolic interaction and social construction of reality, both processes are essential for acting as a group even though on the surface they may not seem to share common values. For example, for Mead (1982) both

the intentions and the interpretations of human behaviour are necessary for taking group action in which each person has to interpret the actions of the rest while giving clues about the intentions behind their own conduct.

It was in the second half of the 20th century that Audio-visual Anthropology emerged as a discipline within Anthropology, concerned with studying the use of audio-visual recordings –photography, sound, video– as part of anthropological research in general and educational ethnography in particular (Ardévol, 2006; van Leeuwen, 2008; Pink, 2007; 2009). In this context, as knowledge of the Other is one of the basic tenets of Intercultural Education, this article aims to tackle the following questions: to what extent do photo and video recordings help to understand the Other, that is, to know the intentions and interpretations of the people acting?; how, and to what extent, do audio-visual narrations provide contextual references for these actions? From a methodology point of view, what audio-photographic and film information should we collect and how should it be analysed to produce audio-visual documents that enable everyone to see the Others' reality and truth objectively? In order to answer these questions, the following section shows some figures and describes the construction of some of the categories generated in the project funded by the Ministry of Culture and Innovation (2009-11). We will then go on to describe the contribution made by NVivo 9, a software program for handling audio-visual recordings in qualitative research, in order to describe, produce and categorise or code the intercultural relationships. Lastly, we will provide a set of conclusions drawn from the analysis.

2. The contribution of audio-visual recordings to knowledge of the other

To illustrate how we approached the issues outlined above, we present some of the elements of the two ethnographies carried out at the kindergarten and primary school (CEIP) «La Paloma» de Azuqueca de Henares (Guadalajara) and CEIP «Cervantes», a primary school in the centre of Madrid. We started work by selecting two groups of pupils at each school, one in kindergarten and the other in primary. We began our field work at the first school on 4 March 2009 and completed it on 16 June 2011. At the second school, field work started on 19 February 2009 and was completed on 21 June 2011. We went to each school one day a week. Both schools were chosen for their cultural diversity, among other reasons. Specifically, in CEIP «La Paloma», the Primary Education section

had: 10 Spanish children, 1 Spanish girl of ethnic gypsy background, 6 Latin American children, 4 Rumanian children, 1 child from Burkina-Faso and 1 child from Morocco; and in Kindergarten: 18 Spanish children, 1 child from Latin America and 3 children from Nigeria. In the Primary Education section of CEIP «Cervantes»: 1 Spanish girl, 8 children from Ecuador, 4 children from Morocco, 1 girl from Paraguay, 2 from the Dominican Republic, 1 Peruvian boy, 1 Italian girl, 1 from the Philippines, 1 from Argentina and 1 from Colombia; and in Kindergarten: 3 Spanish children, 5 from Ecuador, 2 from Morocco, 3 from the Dominican Republic, 1 Peruvian boy, 2 from Bolivia, 1 Italian, 2 from the Philippines, 1 from Argentina and 1 from Venezuela. We worked with a total of 101 pupils.

Both ethnographies shared the feature of working with audio-visual narrations. There is a difference between one and the other ethnography, which is that CEIP «Cervantes» identified pupil groups through video recordings made in the playground, where each week the itinerary and activities of a particular child were filmed. This enabled us to see the companions chosen by each pupil to share their time in school with and the activities and cultural operators mediating their relationships.

During these years, the topics covered by the pupils in their audio-visual narratives were:

In CEIP «La Paloma»: What I like and don't like about school; How I see myself and how others see me; My family and my surroundings; Reporters: Interviews with important women; Reporters: Our view of the playground; School autobiography.

In CEIP «Cervantes»: What we're like; The neighbourhood from my school; The school from my neighbourhood; My autobiography; This is my family; Reporters in the playground; Smells, colours and sounds of Madrid.

In the reference classrooms, the stills and video camera became essential for the «native gaze» to emerge (Ardèvol, 2006; Pink, 2007) through the narratives produced by the boys and girls over the three school years. Photography and video, in addition to the classic function of recording reality that they play in educational research, formed a space where pupils created representation and therefore where meanings

were discussed that enabled everyone involved –pupils and researchers– to understand who they were and what they thought about, what they liked and preferred, and what contexts they inhabited and constituted.

For example, one of the categories we dealt with was «Football: different meanings and practices», explaining that in a group of children who are fans of this sport there is much more going on than merely a particular group having an affinity for a particular physical activity. It revealed the disaffection shown by this group towards their peers, whose preference for other kinds of games and activities excludes them from playtime and complicity both in the playground and in the

We should state that audio-visual data are valid for representing their essential elements and help to produce interesting knowledge when they are handled by computer programs such as NVivo 9, that facilitate the visualisation, ordering, relation, grouping and analysis of different kinds of recordings – text, audio, photography, video, etc.

classroom. As we delved deeper into the data analysis, we found that football as an activity is made up of a whole array of practices and meanings which, to some extent, conditioned the interpersonal relationships of Primary Education pupils at CEIP «La Paloma». We came to understand that among group identities, there is one based on football that lends a certain stability to interactions, turning this sport into a social gathering in the playground, but also into mutual knowledge through which they shared experiences and wishes that went beyond the time spent together at break time. Of the 16 boys and 7 girls in the group, 8 boys mentioned football as a major reference point in all their narratives. As pupils made their photos and audio-visual narratives, we as participating observers began collecting evidence that football was a part of their relationships by which some sought social recognition from their peers by demonstrating their skills and physical prowess in the sport, and by possessing certain items such as footballs and football shoes in the colours of the country's most famous clubs. They sought and obtained the group's recognition and acceptance and this gave rise to a series of shared

meanings: «he plays football well», «he's an ace football player», and so on, in representations of themselves that were recognised by the other children. Seven boys in this group even showed their preference for an ideal type of woman, linked with the image of Sara Carbonero (a Spanish female sports journalist), Angelina Jolie or Cristiano Ronaldo's girlfriend, all of whom were, and still are, references from a context outside school but loaded with meaning for them.

Gaining access to an understanding of this complex dynamic within the interpersonal and intercultural relationships in the sixth year primary school group would not have been possible without the pupils' audio-visual self-narratives. Their lively, emotional and evocative photo and video records of their own referential framework made our field work into an experience of communication, social relations and learning, as understood by Ardèvol (2006), Pink, (2007) and Banks (2007). The task of thinking about what they want to say and what images they want to capture on film, plus showing and sharing their audio-visual productions in the classroom, gave rise to an

exchange of meaning that enabled us to delve into topics and issues around the «school child» and the «social child», or the subject that acts with intent and within a framework of reference. In Figure 1 below, we present the relevance of each of the topics or operators around which we grouped the data for each boy and girl in «La Paloma» school. It is evident that, alongside football, the children shared a series of interests and concerns to do with the subject of «technology». This category was made up of meanings gained from their use of stills cameras and audio recording equipment during the narration process, which were, inevitably, situations that prompted pupils to share experiences and get to know each other better.

This way of proceeding with our study gave the ethnographic process two fundamental aspects, above all because it turned the photos and video recordings into valuable material for accessing «knowledge of the other». One, described by Ardèvol (2006), who argues that the relevance of the self-definitions made possible by using the camera in fieldwork, lies in that the best description of a culture is made by the native

–the «emic» approach– because they are part of the cultural world that we want to understand and because these data are fundamental for addressing the researcher's doubts, questions and interpretations. The other, already described, because audio-visual narratives produce an exchange of meanings that are neither visible nor accessible by directly observing reality, so they became essential material for complementing the observations recorded in our field notebooks². We agree with Wolcott (2003) that if all ethnography demands that we observe the cultural aspects of behaviour to find common patterns, we need to focus our attention not only on actions but also delve into the meanings that these actions have for the social actors involved. Our direct observation of reality, together with the data and information provided by the pupils when they spoke about and discussed the audio-visual narratives, reassessed the subjectivity, interaction and exchange of meaning between the researcher, the pupils and the context in which they were acting and relating to each other (Bautista, 2009; Burn, 2010; Kushner, 2009). To paraphrase Kushner (2009: 10) «the audio-visual has the power to provoke intersubjectivity». This is a fundamental epistemological process for understanding the function and value that audio-visual narratives have in constructing true and consistent knowledge of the Other that, in turn, will allow the intercultural relationship to run smoothly and strongly. But, how did we get

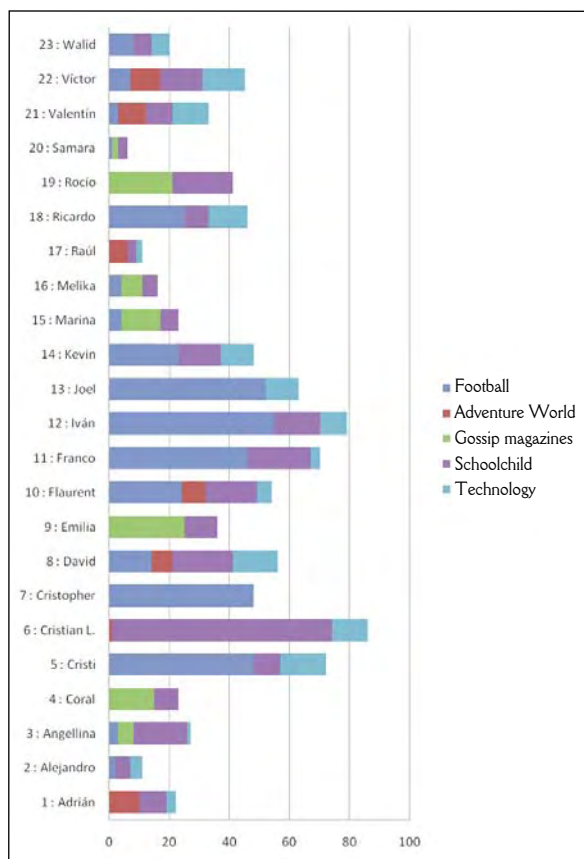


Figure 1: Importance of thematic categories for Primary Education pupils at CEIP «La Paloma».

to categories such as «Football: different meanings and practices», immersed in the content of the audio-visual recordings?

3. Contributions of the NVivo 9 program for handling and analysing audio-visual data

By reviewing computing programs that assist with qualitative research data analysis³, we identified that the NVivo 9⁴ application would be a valuable help in organising, handling and analysing large quantities of data recorded in photographs, audio and video. «Large-scale projects requiring several researchers sharing large quantities of audio-visual data benefit from using this technology. Researchers who decide to use CAQDAS (Computer Assisted Qualitative Data Analysis Software) have a range of options for storing and analysing their data» (Pink, 2007: 139). In our case, it is evident that the value of the audio-visual recordings for our study was heightened enormously by using NVivo 9. Imagine the tedious and laborious task of handling and analysing thousands of photographs and hundreds of video recordings using conventional software. The difficulties in analysing and handling the data would hamper a thorough exploration of the content of the photos and video recordings and narratives, hindering in-depth analysis and cross referencing of the data.

For our research this software turned out to be a tool that simplified the tasks of sorting, analysing, connecting, grouping and viewing textual and audio-visual data collected using various techniques and from different informants. The first activity this software allows us to do is connected with a basic task in ethnography, which is to define and establish initial links between the data. As a tool for carrying out this task, NVivo 9 has various functions for defining and specifying the «links» between photographic, audio, video and textual data, which in our study enabled us to relate pupils' audio-visual recordings to researchers' field notes and comments. To make this task easier from the outset, NVivo has a tool called «queries» which enabled us to explore data in a simple way. With «queries» we were able to ask various questions of the data in such a way that we could start to initially group information together. For example, these «queries» have enabled us to identify which of their peers each child played with during the break times recorded on video. Image 1 below is a screen shot showing the children with which Edward, a Primary Education pupil at CEIP «Cervantes»,

played with and the number of interactions between them in each of the sessions recorded.

NVivo also shows all the information in detail, allowing us to access every moment of each video and enabling us to watch and analyse how Edward relates to each of his 14 peers. These connections between data allow us to «find concepts that help us to make sense of what is happening in the scenes documented by the data» (Hammersley & Atkinson, 1994: 227). As commented above, from the first audio-visual narratives, we discovered how football emerged as a primary concept that made sense of various data collected using different techniques. This meant we could make groupings that allowed us to gradually understand how intercultural relationships were being established and what they consisted of. As in the case of football, these groupings enabled us to validate that behind a love of the sport there was an array of highly diverse meanings and practices that made sense of the relationships between the children and showed the true nature of the boys and girls in the classrooms. NVivo enabled to get a level of intersubjective recording of detailed descriptions and comparative explanation on how our pupils were relating to each other and what cultural objects and practices were mediating in these interactions. As Geertz said, (2001: 37-38) «the task consists in discovering the conceptual structures that inform our subjects' acts, what is «said» in social discourse, and in building a system of analysis in terms

DATOS PATIO. MARZO 2011			
NOMBRE	Recursos	Referencias	
Edward	14	42	
Achraf. 17-11-09	1	3	
Ali. 09-02-10	1	2	
Allegre. 10-11-09	1	2	
Ana. 23-03-10	1	4	
Andrés. 26-10-10	1	5	
Carlos. 03-11-09	1	7	
Katerin. 15-3-11	1	1	
Luis. 22-3-11	1	7	
Nicole. 27-4-10	1	1	
Ronel. 16-03-10	1	1	
Tatiana. 11-05-10	1	1	
Valeria. 29-3-11	1	6	
Walid. 02-03-10	1	1	
Yván. 01-12-09	1	1	

Image 1. Edward's intercultural relationships in the playground (Primary Education, Cervantes).

of what is generic about those structures, what belongs to them because of what they are, is highlighted and remains against other determining factors of human behaviour. In ethnography, the function of theory is to supply a vocabulary that can express what symbolic action has to say about itself, that is, on the role of culture in human life».

This complex process within ethnography needs a tool that is sufficiently flexible and powerful to relate different kinds of recordings (textual, digital, audio-visual, image, sound, etc.). «Nodes» such as the ones used by NVivo enabled us to do this complex task. As shown in Image 2, in addition to an accessible environment for working with the data, this tool enables complex groups of meanings to be set up as they are built from different kinds of recordings, at different times and by different individuals.



Image 2: Records contained in a «node».

NVivo 9 also provides a workspace that is not available in any other CAQDAS, as Lewins & Silver (2007) acknowledge, and we consider it to be essential for any ethnographic research project and for our study in particular. The data grouping environment called «cases» helped us to focus on the study of each boy and girl and was where we stored various kinds of data to know more about them. Image 3 shows the twenty-five cases of the pupils in 6th year of Primary Education at CEIP «La Paloma», holding a large number of audio-visual recordings taken by the children together with recordings obtained by the three researchers who provided relevant information about who they were and what their relationships were.

This way, we captured the view of several participants and what was anecdotal and meaningful in the actions and discourse of the social agents; this enabled us to know what they were feeling and thinking in order to understand how they were acting. In these groups of «cases» we collected each pupil's discourse, together with the views of their classmates and any relevant events recorded by the researchers involving each of the subjects. We therefore built second order data because we coincided with Geertz (2001: 23) in that «what we call our data are really interpretations of

interpretations of other people on what they and their fellow countrymen think and feel». Returning to Image 2, it can be seen how each «case» groups together different kinds of recordings, giving us easy access –as with the «nodes»– to audio-visual and textual data, and verify for each child –as in the case of the example under discussion– what cultural operators were mediating in their relationships and what practices were associated, as well as the meanings they held for each pupil.

With the same work options provided by the grouping of «nodes», in «cases» we were able to access each pupil's many audio-visual representations, as well as the discourses and meanings extracted during the process of eliciting the image referred to in the above paragraph. The potential of the «cases» lies in providing a space in which to describe the story of each social agent, their values, meanings and norms that govern their social life and that allows them to be embodied. The «cases» allowed us to look at individuality, the detail of the culture as it was experienced by each pupil, enabling us to make sense of reality from an intersubjective discourse and get under each boy and girl's skin to understand their point of view and their feelings in their different contexts: school and social.

4. Conclusions

We understand that knowledge of the Other is one of the core aspects of Intercultural Education and of the solution to the «etic-emic» dilemma faced by ethnographic studies. We approached this knowledge by specifying and sharing the intentions and interpretations of human actions in situations of collaborative work, such as the audio-visual narration of stories that are relevant to the people in them. In this context, we can provide some answers to the three questions posed in the introduction:

To what extent can photo and video recordings help to understand the Other, that is, to know the intentions and interpretations of the people acting? In the work carried out during the school years 2008/09, 2009/10 and 2010/11, both photographic and video images were the basic systems used for representing the collaborative relationships, as they enabled us to show not only the perception of reality through the eyes of the people taking part, but also to convey attitudes, feelings, events and intangible relationships that are hard to communicate using words; in the case of some pupils, the fascination with fame or the power of

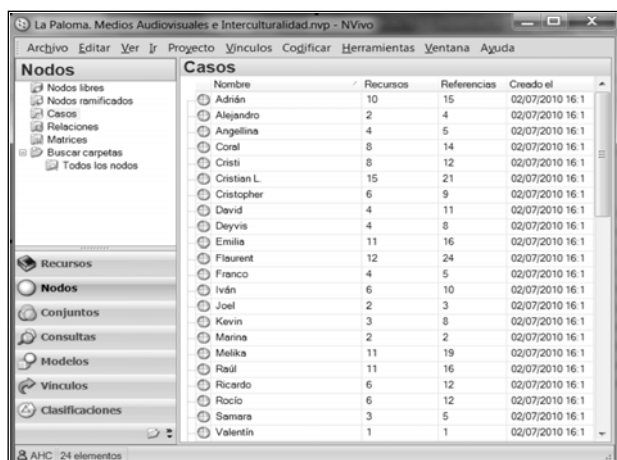


Image 3: Each boy or girl shown as a «case».

some football players. In this sense, we consider that the use of photographic and film language was valuable in capturing the intentional behaviour of some of the participants and to show the interpretations of those on the receiving end of these actions.

How and to what extent do audio-visual narrations provide contextual references of these behaviours? We found that the photographic and film language used in the stories or in the autobiographical accounts favoured an understanding of pupils' personal or socio-cultural reality, as it gave continuity to the situations they experienced through the spatial and temporal aspects recorded. This essence of the narration has enabled us to contextualise socio-cultural events, indicating not only the physical characteristics of the people and places involved, but also to present them in the economic or political framework in which they live, that is, in a specific place and at a particular moment in time. That contextualisation helps to make sense of someone's life – the beliefs, thoughts, emotions, intentions and so on that explain their actions – and to facilitate an understanding of the interpretations of that life made by the people they interact with. They are representations that facilitate knowledge of the Other, an essential aspect of Intercultural Education.

What audio-photographic and film information should we collect and how should it be analysed to produce audio-visual documents that enable everyone to objectively see the Others' reality and truth? We have said that audio-visual recording is a good tool for collecting information on human phenomena. To understand how that recording should be made, we should add that social situations are historically and culturally organised, that these scenarios of activity are

made up of material and symbolic elements with meanings that make sense of behaviours and relationships that occur within them. Therefore, to understand the action of humans in those scenarios –their intentions and interpretations– their continuity in space and time should be recorded, as their meanings are in the temporal order and in the succession of places in which these practices occur; a «continuum» that is inherent in film language. Now, as well as addressing the continuity of the film shots of the cultural situations under scrutiny, we should add the importance of the camera's point of view, the requirement to give the recorder to the Others so that they can convey their intentions, concerns and interpretations; this will enable us to confront

the «etic-emic» dilemma and, for example, find out the reason for their affections or the attraction that a high proportion of pupils taking part feel for audio-visual technology. Lastly, as we reflect on intercultural relationships, we should state that audio-visual data are valid for representing their essential elements and help to produce interesting knowledge when they are handled by computer programs such as NVivo 9, that facilitate the visualisation, ordering, relation, grouping and analysis of different kinds of recordings – text, audio, photography, video, etc.

Notes

¹ It may be worth pointing out that these processes of elicitation entail a projective observation as contemplated by audio-visual ethnography, which consists in putting social agents in front of their own still shots or films in order to obtain more and better data. This became a technique that enabled comments to be recovered and events remembered in order to delve deeper into them, as well as generating discussion, views and exchanging different points of view (Ardèvol, 2006). During three school years, pupils made narratives about nine topics, so we worked on one topic per quarter.

² We have already pointed out the elicitation processes produced by pupils' audio-visual narratives and the resulting projective observation. We can now point out that this type of observation produced a textuality from the story, or narration of what was being represented, enabling us to make a dialogic observation of the reality within a structure of exchange of knowledge and interpretations alongside the pupils. The photo and video records meant that it was possible to make observations that complemented our direct perception; this enabled us to complete, explain, discard or delve deeper into the information and descriptions in our field notebooks.

³ This group of software packages is known as CAQDAS: Computer Assisted Qualitative Data Analysis Software.

⁴ There are various types of software available to help analyse qualitative data and they are described in work by Weitzman & Miles (1995), Fielding & Lee (1998) and Lewins & Silver (2007). We used «code-based theory construction software» for its complexity and its flexibility in handling and analysing data. The website for the CAQDAS Project being carried out by leading intellectuals for data study is also a useful resource.

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Food Advertising and Consumption by Students in Huánuco (Peru)

Publicidad y consumo de alimentos en estudiantes de Huánuco (Perú)

ABSTRACT

The significant shortcomings detected in the nutrition of students in the district of Huánuco (Peru), together with the television advertising observed for products of dubious nutritional value, led us to design and conduct a research project intended to analyse the relationship between the two: The influence of television commercials on the consumption of food products advertised in 2010, which is summarised in this article. In the study we carried out a correlative study of a sample of 120 pupils at different educational establishments. They answered questionnaires, were interviewed and underwent physical examination. We also analysed the food commercials broadcast by television channels and the nutritional value of the products. Chi-square inferential analysis was used. The research showed that the pupils' health has been adversely affected, with a serious incidence of tooth decay, a problem attributed to the consumption of certain foodstuffs. The study detected a positive relationship, which was highly significant statistically, between attachment to television advertisements and the consumption by the pupils of advertised foods which are rich in sodium, calcium, sugar and calories. Also demonstrated was the interdependence between exposure to television advertising and the consumption of foods with a high fat content, which should be monitored and controlled by government officials.

RESUMEN

Las importantes carencias nutritivas apreciadas en estudiantes del distrito de Huánuco (Perú), junto con la publicidad televisiva de productos de dudosa calidad nutricional observada, nos llevó a plantear y desarrollar una investigación con el objeto de analizar la relación entre ambos fenómenos titulada: Influencia de los anuncios televisivos en el consumo de alimentos publicitados durante el 2010, cuyo resumen se presenta en este artículo. En la investigación planteamos un estudio correlacional con una muestra de 120 escolares de diversas instituciones educativas, a quienes se aplicaron satisfactoriamente encuestas, entrevistas y guía de evaluación física; también se analizó la publicidad emitida por los canales de televisión sobre alimentos y su contenido nutricional. El análisis inferencial aplicado fue Ji cuadrado (χ^2). Con esta investigación se ha demostrado que el estado de salud de los escolares está afectado, siendo muy agudo respecto a la caries dental, problema que se atribuye al consumo de ciertos alimentos. Se constata que existe relación positiva, con alta significancia estadística, entre la adherencia a los anuncios televisivos y el consumo de alimentos publicitados de alto contenido en sodio, calcio, azúcar y de calorías por los escolares estudiados; así mismo, se prueba la interdependencia entre la exposición a los anuncios televisivos y el consumo de alimentos con productos de alto contenido en grasa que merecen ser vigilados y controlados por los responsables.

PALABRAS CLAVE / KEYWORDS

Nutritional habits, scholars, school, advertised products, food consumption, advertising, health, adherence. Hábitos alimenticios, estudiantes, escuelas, productos publicitados, consumo de alimentos, anuncios, salud, dependencia.

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1. Introduction

Children have become an attractive segment for manufacturers and advertisers, as they have more disposable income than previous generations and influence the buying decisions of their families. Companies have discovered that by developing brand loyalty at an early age they can obtain substantial profits, a situation which has led to an international debate on the harmful effects that advertising can have on children. This media study attempts to analyse the existence of a relationship between television advertising and the consumption of the food products advertised, together with the repercussions on health of such consumption. Television socialises and teaches and is present in most homes. Children are quick to pick up what is shown on television, making it a powerful factor in their environment, which influences behaviour, attitudes and values. When considering the cognitive field, the youngest children are more vulnerable to advertising and it is easier to persuade them to buy a particular food item. The studies by Mardomingo (1984: 24) concluded that publicity messages, especially those on television, were clearly the influential factor in children's eating habits. According to Morón (1995) television, publicity and consumption are different sides of the same coin, as television advertising favours familiarity with new food items and their acceptance. Today we can see in the population as a whole a new way of eating. It has little to do with people's gastronomic traditions and has developed via the consumption of items like fast food and «junk food», promoted worldwide through publicity and marketing strategies. Certain television programmes tacitly or implicitly promote concepts which are a risk to health and models which are contrary to a proper quality of life. The analysis of advertisements reveals practices and values which are not healthy. For Robinson (1993), publicity for food tends to emphasise food rich in calories and poor in nutritional value and can lead to erroneous beliefs. Contreras (1995: 78) supports this analysis, indicating the existence of a food culture in which powerful, complex social and cultural factors condition eating. From an early age children learn the eating habits of their elders, notice what food is served at parties and progressively develop their own food culture. There is a kind of furtive marketing, in which brands become part of popular culture and consumers are encouraged to spread the message. Television advertising becomes a powerful element which can easily position a product in a child's mind. As children make buying decisions indirectly through their parents or directly with their pocket money, their role as indirect

customers should not be underestimated. Sometimes pressure by children determines decisions by adults to purchase products advertised on television. This phenomenon has been analysed for some time, showing the influence of food advertising and the negative eating habits of children who display nutritional disorders (Olivares, Yáñez & Díaz, 2003: 30).

From the cultural viewpoint Sauri (2003: 54) has shown that cultural patterns determine behaviour patterns through communication processes which directly influence concepts of food and health. Broadening the analysis, the author points out that the messages transmitted in television advertisements occupy an important place in the construction of cultural identity and play a part in the development of behavioural concepts and models that contribute to the collective memory of the population, displacing values and customs which have no place in the new lifestyles transmitted by these messages. Elsewhere (2003: 238), at the same time, she points out that in the current urban context, television constitutes one of the most important institutions through which culture is constructed.

In Chile, Olivares, Yáñez and Díaz (2003) carried out research into food advertising and eating habits in schoolchildren, administering a survey to a sample of 274 children in public schools. The results confirmed the hypotheses, showing the influence of publicity on consumption.

The US Institute of Medicine (2005) demonstrated, via empirical studies, that publicity aimed at children encourages bad eating habits. The FAO and the World Health Organization (WHO) have declared that publicity has a direct effect on children's purchasing preferences. These in turn influence their parents, which leads to bad eating habits that can be harmful to health. It is recognised that publicity has been playing a negative role in eating habits, contributing to an increase in chronic problems among schoolchildren.

In Ecuador, González, Quizhpe, Armijos and Álvarez (2006) studied the influence of television on the nutrition and academic performance of the pupils at the «Abelardo Tamariz Crespo» centre. The sample consisted of 288 children aged 8 to 13. The results of the study show that 21.1% of pupils were overweight or obese.

The Eroski Consumer Foundation (2007) reports the results of research carried out in the United States, in which the influence of food publicity was studied, evaluating the preferences of a group of 63 children in California aged three to five. They were offered the McDonald's brand hamburgers, chicken, nuggets and chips, as well as milk and carrots bought from a super-

market. The study concluded that previous publicity influenced the choice of food.

In Chile, Cáceres, Pastenes and Ibarra (2008: 10) analysed the nutritional content of food advertised for children, concluding that publicity plays a negative role as it is an important factor in the increase in obesity.

In Mexico, Moreno and Toro (2009) produced a study entitled «La televisión, mediadora entre consumismo y obesidad» (Television, mediating between consumerism and obesity). The sample consisted of 448 children of both sexes aged 6 to 13, from urban primary schools in San Luis de Potosí. They concluded that, rather than acting as a mediator, television encourages the consumption of products that lead to obesity.

A study sponsored by the Who (2010) concludes that publicity is closely related to childhood obesity, as it has a direct influence on children's purchasing preferences and they, in turn, influence their parents. The interest of these topics can also be seen from the numerous references to them in specialised publications. «Comunicar» has published various studies dealing with issues similar to that covered by this article. They include the following:

Issue 31 contains two texts. The first is the result of research by Del Río & Del Río (2008: 65-108) and deals with the construction of reality by children as a result of their television diet. The second, by Digón (2008), is entitled: «Children's programming and sensationalist TV: entertain, misinform, miseducate». In issue 33, Sevillano, González and Rey (2009: 185-192) present the study «Television, attitudes and drugs in adolescents: research into their effects». In issue 36 researcher Quiroz (2010: 35-42), provided another contribution, entitled: «Television, seen, heard and read by Peruvian teenagers». This study is close to our own in time and space, having been carried out in Lima. We can see, then, that we are dealing with a topical subject of universal interest.

2. Material and methods

2.1. The problem

The research we have conducted, which this study is part of, is justified for the following reasons.

Firstly the child population of Huánuco (Peru) continues to be exposed to television advertising that encourages the consumption of products of no nutritional value, leading to extensive nutritional disorders in schoolchildren, such as malnutrition, obesity or being overweight. The issue is also important as nutritional imbalance can lead to illness from an early age and helps to perpetuate the population's lack of development and a low quality of life. Moreover, in the current urban context, television is the medium that has the greatest impact on the population, especially on children and teenagers.

In response to these problems a project was drawn up with the aim of determining the influence

Children are quick to pick up what is shown on television, making it a powerful factor in their environment, which influences behaviour, attitudes and values. When considering the cognitive field, the youngest children are more vulnerable to advertising and it is easier to persuade them to buy a particular food item. The studies by Mardomingo (1984: 24) concluded that publicity messages, especially those on television, were clearly the influential factor in children's eating habits.

on food consumption of television advertising aimed at schoolchildren in the Huánuco district in 2010, with a view to providing a scientific answer to the question: «What relationship is there between attachment to television advertising and the consumption of the food items advertised?». The results of the study will allow improvements to be made in the area of publicity and in consumption of the food items studied. Its findings have already been made available to local government officials and will benefit the population at risk.

2.2. Objectives

To identify the social and demographic characteristics of the pupils in the study. To establish what publicity for food products was broadcast by television channels and aimed at schoolchildren in the Huánuco district, to examine their viewing habits, determine the

eating habits of the children in the sample, identify health problems linked to their diet, and analyse the influence of television advertising on consumption by schoolchildren in the Huánaco district of the food products advertised in 2010.

2.3. Variables

- Dependent variable: Consumption of food items advertised on television.
- Independent variable: Exposure to television advertisements.

Among the other possible variables whose effects it was desirable to monitor, in the interests of methodological coherence with the aims of the study, we find it useful to consider the role of mothers, grandmothers, aunts, teachers or other people with an influence on the diet of the sample studied. We believe it to be obvious and almost axiomatic that the diet in a home or school depends partly on decisions taken by adults responsible for the care and education of children and adolescents. These adults are primarily mothers and fathers and secondly teachers and those who prepare school menus. Any dietitian can explain that the key to attacking the problems of tooth decay and obesity (two of those quoted in the article) lies with mothers who are not sufficiently well informed or give in too easily to their children's requests or demands, exhibiting weakness from the point of view of the educator. Sometimes mothers act as mediators between television advertising and the desire of children and teenagers to eat what they see in advertisements. Mothers have two important tools at their disposal: they can educate children in healthy eating habits, rationing and selecting what they see on television, and can make decisions on the family diet. However, in this first study, we thought it more pertinent to analyse in depth the role of television, reserving for a future occasion the study of independent variables such as the role of mothers, teachers and others. This work could even include a comparative study with a view to developing a comprehensive educational programme, involving different social agents with responsibility for the nutrition of children and teenagers.

2.4. Means of gathering information

- Visiting schools or, if necessary, homes.
- Informed consent form from pupils' parents or tutors.
- Confidentiality and data protection agreement.
- Various questionnaires.

2.5. Data Processing

Revision, coding, classification, presentation and interpretation of results using descriptive and inferential analysis. The inductive-deductive method was used to draw conclusions and generalise results.

2.6. Sample Selection

The sample consisted of 120 subjects, divided equally between boys and girls. They were classified in three age groups, each accounting for 33.3% (40) of the total: 6 to 8 years, 9 to 11 years, and 12-14 years. A majority (65%) were from private schools (78 children). The following were excluded from the study: children without a television at home, children not attending school regularly, children who did not agree to take part in the study.

3. Results

Among schoolchildren, watching television is the most popular recreational activity (46.7% name it as their favourite). 95% spent an average of 1-2 hours watching continuously while 93.3% watched for a total of 1-4 hours per day. 40% reported that they had television in the living room at home. However, 38.3% reported that they had television in more than two pla-

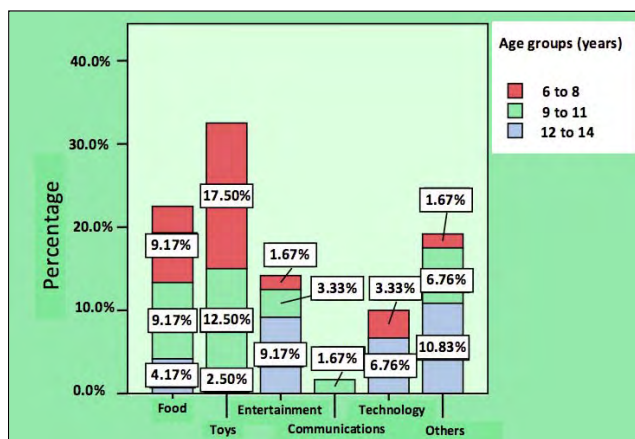


Figure 1. Preferences by age

ces at home, the bedroom being the place most frequently mentioned (50%). The favourite programmes of the youngest children (aged 6 to 8) are almost exclusively cartoons and the same preference is found in the 9 to 11 group. The oldest group prefer television series and news programmes. The following chart shows children's preferences concerning the content of publicity, according to age groups.

One of the questions in the study referred to the

consumption of food items while children were watching television. Their replies show that 43.3% regularly ate while they were watching television. 18.3% ate fruit, while similar percentages ate popcorn, cereals and other junk food. According to the study, attachment to television advertising for food items on free-to-air channels was as follows:

	(n = 120)	
	No.	%
Frequency of viewing		
Always	24	20.0
Nearly always	82	68.3
Never	14	11.7
Reason for viewing		
Not applicable	14	11.7
Because it's on TV	24	20.0
It's in the programmes I see	28	23.3
They show new products	34	28.3
The adverts are interesting and entertaining	9	7.5
Other	11	9.2
Interest in nutritional information		
A great deal	26	21.7
Not much	40	33.3
None	54	45.0
Perception of guarantees of quality		
Always	4	3.3
Nearly always	48	40.0
Never	68	56.7
Easy to purchase		
Very easy	28	23.3
Easy	68	56.7
Difficult	2	1.7
Very difficult	22	18.3
Total	120	100.0

Table 1. Television-related factors that influence the consumption of the food items studied.

According to the data from the study, 68.3% report that they almost always see advertisements for food products. Surprisingly, 45% of the pupils do not pay attention to the nutritional information provided for these products. 40% assume that they have a guarantee of quality. Lastly, 56.7% say that the products advertised on television are easy to purchase.

Preliminary filtering was carried out to identify the products that pupils recognised in advertisements shown on different TV channels. Regarding the nutritional value of the products advertised, the main components of Lay's crisps («Papas Lays: del campo a tus manos») are sodium and carbohydrates. The advertisement for the product lasts 45 seconds and is shown on six free-to-air channels. It is shown most extensively on «América TV» and «Panamericana», 12 times a day on each, making a total of 540 seconds per day on each channel. It is also shown extensively on other channels, total time ranging from 360 to 450 seconds per day. Total: 2,700 seconds of publicity per day (45 minutes). Another product, «Yogurt Gloria» (yogurt), which has a high content in calcium, is advertised on

three free-to-air channels, the advertisement lasting 30 seconds. It is shown most often on «TV Peru»: 10 times a day, making a total of 300 seconds' publicity per day on the channel. It is also shown extensively on other channels, for a total time of 240 seconds per day. Total: 3,240 seconds (54 minutes) of publicity per day, adding the time for all channels.

The diagram shows that there are three fundamental reasons for preferring a television advertisement for a food item: because it shows products which are new to the market, because the advertisements are broadcast during schoolchildren's favourite programmes, and because they appear on television. The greatest concentrations of pupils with high and medium average product attachment are found among consumers of the products advertised.

4. Discussion

The findings of this research provide useful information about the viewing habits common to nearly all the pupils in the study. Cumulative viewing time during the day amounts to 1.4 hours [93.3% of the sample (112 pupils)], habits which coincide with those recorded by Hernández and Parra (1997), who observed that adolescents and pre-adolescents spent an average of 4.1 hours per day watching television and 1.7 hours playing with video games or watching videos. Ávalos (2009) reported that schoolchildren in Colombia spend about 20 hours per week in front of the television. The studies by Callejo (2008) similarly show that the heavy consumers identified watch nearly four hours of television every day.

When we analyse the variables of attachment to television advertising and the consumption of food items with a high sodium content by the pupils studied, we see that there is a high, very significant correlation [$\chi^2 = 13.531$; GL=2; $p=0.001$]. These results coincide with those of other studies. Television advertising is dominated by products whose frequent consumption is described by dieticians and nutritionists as inadvisable and unhealthy, food items which encourage eating habits among children and young people which are distant from, or indeed opposed to, the requirements of a balanced diet, leading to cardiovascular problems and increased blood pressure, among other problems.

The research of Olivares, Yáñez and Díaz (2003), carried out in the Mexico City Metropolitan Area,

shows that children in levels 5 to 8 of primary education watch television more than 3-4 hours per day. It was also found that they habitually consumed advertised products such as «Papital Lays» (crisps), «Yogurt Gloria» (yoghurt), «Mantequilla Gloria» (butter), «Oreo» and «Sublime» (chocolate biscuits). This finding is supported by the analysis carried out by Sauri (2003), who reports that children develop their tastes

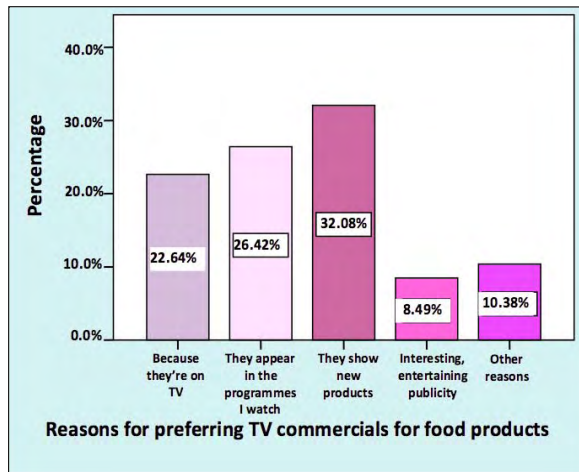


Figure 2. Favourite food items.

and preferences for food items as a result of television advertising. Their favourite advertisements were those for packaged products such as crisps, chocolates, biscuits and sweet drinks. 69.7% of the children said they liked watching the advertisements. 88.7% remembered an advertisement for a food product. Based on these results, she concluded that advertising on television is a powerful weapon that can easily establish the presence of a product in a child's mind. The publicity liked most by pupils is for toys, followed by that for food items. The analysis of the content of advertisements carried out by the Australian Consumers' Association shows that advertisements for food products account for 44% of all television advertising between 3.00pm and 6.00pm, the time when most children are watching. Within the category of food items, the subcategory sweets, biscuits, chocolates and snacks has the strongest presence on television when children are watching.

The publicity identified by the study follows the AIDA model (attention, interest, desire, action), which lists the steps necessary to achieve the desired effect on the audience: capturing their attention, awakening their interest in the product, fostering their desire to have it, encouraging them to buy it (Rodríguez, 2007: 44). Studies by the Eroski Consumer Foundation

(2010) have shown that the habitual consumption of foods rich in sugar, fats and salt create an imbalance in children's diets and bad eating habits are directly and proportionally related to future anomalies such as obesity and diabetes. As the report says: «Sweets: zero for nutrition». These items have no nutritional value and, because of their high sugar content, they often lead to tooth decay, obesity and bad eating habits.

The results of the study enable us to make the following recommendations:

- Regarding education policy: Programmes should be designed focusing on the development of good eating habits and customs linked to diet and life-style, especially in schools, which are directly in contact with pupils.

- Regarding health policy: A law should be drawn up regulating the food and nutrition of schoolchildren. The health and education sectors should work together on nutrition. Educational strategies should be developed to modify the behaviour of schoolchildren, advice on nutrition for the pupils most at risk and training for teachers and others who will act as role models should be provided. Staff in medical centres should pay special attention to training families and organising activities to promote health with parents, as both home and school should be places where good dietary habits are encouraged.

- On the commercial level: The search for a balance between healthy food and current lifestyles is a challenge for the producers of snacks; they must develop new formats that reflect nutritional value, changing their scale of values to favour the well-being of the end consumer, not only by offering attractive prices but also by searching for sources of nutrients to meet new needs and support the trend for the whole family to consume healthy food. Education in nutrition should be developed jointly with publicity for food products, and urgent attention paid to the promotion of products with no harmful effects.

5. Conclusions

- 46.7% of the sample studied prefer watching television to enjoying other leisure activities. 95% (114 subjects) spent an average of 1-2 hours watching continuously while 93.3% (112) watched for a total of 1-4 hours per day. 40.0% (48) reported that they had a television in the living room, while 38.3% (46) have one in more than two parts of the house, the bedroom being the favourite place for 50.0% (60) of respondents.

- The favourite channel for 38.3% (46) was channel 15 («América TV»). The most popular type

of programme was cartoons, preferred by 58.3% (70), followed by television series, the favourite of 21.7% (26). The series «Al fondo hay sitio» and cartoons on cable TV are the favourites of 28.3% (34). The most popular publicity is for toys, followed by food, mentioned by 22.5% (27).

- A majority of pupils [80.0% (96)] are moderately attached to television advertising for food products on local channels. 85.8% (103) are consumers of the products advertised on television.

- The products advertised are as follows: «Papas Lays: del campo a tus manos» (crisps), «Yogurt Gloria», «Mantequilla Gloria» (butter), «El Sublime con galleta» and «El Oreo dúo» (biscuits) and the following nutritional data was recorded.

- The nutritional state of 85.8% (103) of the pupils in the study was good or normal, while 8.3% (10) were at risk of being underweight and 2.5% (3) at risk of obesity. 3.3% (4) were underweight.

- There is a positive, highly statistically significant relationship [$\chi^2=9.97$; GL=2; $p=0.007$] between the variables attachment to television advertising and consumption of the food products advertised. When we analyse the variables exposure to television advertising and consumption of food items with a high sodium content, we see that there is a high, very significant correlation [$\chi^2=13.531$; GL=2; $p=0.001$].

An analysis of the variables exposure to television advertising and consumption of food items with a high calcium content shows that there is a high, statistically significant correlation [$\chi^2=11.059$; GL=2; $p=0.004$]. Watching television advertisements determines the consumption of these products.

In the case of the variables exposure to television advertising and consumption of food items with a high sugar content, we find a moderate but statistically significant correlation [$\chi^2=7.621$; GL=2; $p=0.022$]. Television advertising influences the consumption of these products.

- It was also found that consumption of products with a high calorie content is influenced by television advertising, there being a high positive statistically significant relationship [$\chi^2=11.229$; GL=2; $p=0.004$].

- The variables exposure to television advertising and consumption of food items with a high fat content are independent [$\chi^2=2.31$; GL=2; $p=0.315$].

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Fame and Professional Success in «Operación Triunfo» and «Fama ¡a bailar!»

Fama y éxito profesional en «Operación Triunfo» y «Fama ¡a bailar!»

ABSTRACT

The main aim of this paper is to identify the values conveyed by «Operación Triunfo» and «Fama ¡a bailar!». Their popularity (especially among young people) and prescriptive nature (they convey life models by means of identifying problems and proposing objectives and solutions) make them relevant study objects. This paper focuses on how work and fame are depicted in «Operación Triunfo» and «Fama ¡a bailar!», two areas that have hardly been studied in Spain. In order to fulfil the objectives of this paper, these programmes were analysed using a methodology that combines narrative semiotics, audiovisual style and narrative form analysis, as well as ludology and game design theory. The analysis shows that these programmes depict professional success as personally and socioeconomically rewarding, although it is extremely difficult to achieve. To obtain this success, the contestants are transformed through education and celebritisation. Finally, in these programmes there is a conflict between talent and fame. This paper concludes that «Operación Triunfo» and «Fama ¡a bailar!» present fame as a life aspiration and also show the mechanisms used to produce it. The programmes depict modern society as meritocratic and evidence the importance of image in the modern workplace. Finally, they describe a «good worker» as someone passionate about their work, adaptable and capable of sacrificing his/her personal life.

RESUMEN

El presente artículo tiene como objetivo analizar los valores vehiculados por «Operación Triunfo» y «Fama ¡a bailar!». Su relevancia como objeto de estudio reside en su popularidad (especialmente entre los jóvenes) y su carácter prescriptivo (transmiten modelos de vida a partir de la identificación de problemas y la propuesta de objetivos y soluciones). Este artículo explora cómo representan el ámbito profesional y el concepto de la fama «Operación Triunfo» y «Fama ¡a bailar!», dos temas poco analizados hasta ahora en España. Para ello, se propone una metodología que combina la semiótica narrativa, el análisis de la enunciación audiovisual y el estudio de las reglas del concurso. El análisis revela que en estos programas se representan el éxito profesional como gratificante a nivel personal y socioeconómico, aunque también muy difícil de conseguir. Para alcanzarlo, los concursantes son transformados mediante el aprendizaje y la «celebritización». Finalmente, hay en estos programas una fuerte tensión entre el talento y la popularidad como formas de llegar al éxito. El artículo concluye que «Operación Triunfo» y «Fama ¡a bailar!» son programas que prescriben la fama como aspiración vital y reflexionan sobre su proceso de producción; transmiten una visión meritocrática de la sociedad actual; ponen en escena la importancia de la imagen en el entorno laboral y definen un buen profesional como alguien apasionado, maleable y capaz de sacrificar su vida personal.

KEYWORDS / PALABRAS CLAVE

Reality TV, entertainment, semiotics, audiovisual narrative, audiovisual style, game rules, values, fame. Tele-realidad, entretenimiento, estudios semiológicos, narrativa audiovisual, lenguaje audiovisual, reglas de juego, valores, fama.

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1. Introduction: study object and objectives

«Operación Triunfo» debuted in Spain in 2001, setting a new trend in «reality game shows»¹ in this country. This format combines the characteristics of «Pop Idol» (United Kingdom, ITV, 2001) and «Big Brother». Like «Pop Idol» it is a contest in which young people who are unknown to the public and who can sing well compete with each other over several weeks for a recording contract, and in which the audience (after a pre-selection process by a panel of judges) chooses which contestants continue through each round until a winner is finally chosen. Like in «Big Brother», the contestants live together in a closed, isolated, purpose-built house full of cameras while they receive classes; the programme is organised into weekly shows in which the contestants are nominated or evicted, with daily summaries of the «everyday life» of the participants in the academy; and the content expands over different time slots and media following the logic of the «killer format» (Pérez Ornia, 2004: 81-84).

In Spain the «Operación Triunfo» format was emulated by other programmes following the innovation/repetition/saturation cycle characteristic of the media: «Academia de actores» (Antena 3, 2002); «Popstars» (Telecinco, 2002); «Supermodelo» (Cuatro, 2006-08); «Fama» *la bailar!* (Cuatro 2007-11); «Circus» (Cuatro, 2008) and «El aprendiz» (LaSexta, 2010). Of these, only «Fama *la bailar!*» gained a certain degree of success and was broadcast for several seasons. In this reality TV show, young amateur dancers compete with each other for a study grant. The programme is based on the «Operación Triunfo» formula but includes some modifications: although it is an individual contest, the contestants compete in pairs; new contestants enter the programme after the weekly evictions; the teachers are also judges; the programme is broadcast daily, including performances, nominations and evictions; and the weekly shows only begin after a few weeks.

These programmes have had a strong impact on the Spanish television panorama and the social imaginary, especially in relation to the redefinition of fame and the way of understanding work. The aim of the present article, therefore, is to analyse the values conveyed by «Operación Triunfo» (henceforth «OT») and «Fama *la bailar!*» (henceforth «Fama») in relation to these two areas.

In Spain «OT» has been analysed from different perspectives. Studies have been carried out on its interactivity and the role the audience plays (Selva, 2003-04; Castañares, 2006; Fouce, 2008), its multimedia expansion strategy (Cebrián, 2003) and the values it

conveys (Cáceres, 2002; Sampedro, 2002, two analyses that are similar to the one proposed here). However, not very much theoretical attention has been paid to this programme's discourse on fame (a perspective that can be revealing and productive, as shown by Holmes (2004a), Ouellette and Hay (2008) and Redden (2008), nor has the programme been related to other similar formats such as «Fama».

In this article we bring together the main research results and conclusions of a doctoral thesis that was presented at the Department of Communication of the Universitat Pompeu Fabra in September 2010 (Oliva, 2010), which analysed «Cambio Radical», «Desnudas», «Esta casa era una ruina», «Supernanny», «Hermano Mayor», «Ajuste de Cuentas», «Operación Triunfo» and «Fama *la bailar!*». This article summarises the main results and conclusions of the chapters devoted to the last two formats.

2. Material and methods

To answer the main analysis question (What values do «OT» and «Fama» convey in relation to work and fame?) we used textual analysis (Casetti & Di Chio, 1999: 249-292), that is, a detailed study of the elements that make up the audiovisual work in order to understand its organisation and meaning. The text itself, regardless of the personal readings that can be made of it, is the base of the viewer's interpretation, it is what centres and guides their reading. Therefore, although the viewer's capacity to decode the text freely is important, we cannot forget the responsibility the text has in relation to the values conveyed and endorsed.

To carry out this study we have developed an analysis protocol² that combines two consolidated perspectives of textual analysis that are not usually found together in the same study: narrative semiotics and the study of the narrative form and audiovisual style.

Narrative semiotics consists of analysing the story structure. First, we analysed which narrative roles the characters (applicants, contestants, teachers, judges and viewers) play in the story. The roles identified are: subject of doing (hero), subject of state (benefits from the actions of the subject of doing), object of value (that which is desired), sender and receiver of the contract (sets and receives a mission respectively), opponent (hinders the actions of the subject of doing), helper (helps the subject of doing), rival (wants the same object of value as the subject of doing), sender and receiver of sanction (gives and receives recognition or punishment respectively). Second, we analysed the

states of the actants (initial and final states, states of conjunction or disjunction with respect to the object of value or competence of doing), their actions and the transformations of state as a consequence of these actions.

For the analysis we took into account the contributions of Greimas (1971) and Courtés (1980), founders of the discipline, as well as Ruiz Collantes (Ruiz Collantes, Ferrés & al., 2006; Ruiz Collantes, 2009), who adapted this methodology to the analysis of audiovisual texts. As Ruiz Collantes shows in his studies, systematically assigning certain roles and states to certain social groups has consequences in relation to how these collectives are represented.

To these more abstract elements we have added the study of the characters' traits (gender, age, social class, habitat, physical appearance) and the spaces the programmes are set in (structure and design of the environment in which the action takes place (Cassetti & Di Chio, 1999: 274-279).

We completed the semio-narrative analysis by studying the narrative form and audiovisual style with the aim of identifying the meaning that emerges from «how» the story is told, how the text guides the viewer's interpretation and how it constructs a model viewer (Eco, 1981)³. The audiovisual language has been analysed in detail (types of shots, camera angles and movements, sound and music, editing, computer graphics, lighting), as well as the narrative form: plot organisation (narrative acts, climaxes, turning points), time (order, duration and frequency), point of view (how the information is distributed between the viewer and the characters) and the presence of explicit narrators and narratees (receivers of the narration present in the text, for example, the on set audience). The analysis of the narrative form and audiovisual style was based on the contributions made by Bordwell and Thompson (1995); Gaudreault and Jost (1995); Kozloff (1992); Cassetti and Di Chio (1999: 249-292); and Aranda and De Felipe (2006).

In addition, given that «OT» and «Fama» are contests, we have added a third analysis methodology to these first two that is less used for studying television: the analysis of the game rules. As Pérez Latorre (2010) shows, the rules of a game also convey meaning and

values. The analysis protocol is based on the contributions of the canonical authors and works of ludology and game design theory (Egenfeldt-Nielsen, Heide Smith & Pajares Tosca, 2008; Juul, 2005; Salen & Zimmerman, 2003). We analysed the programmes' explicit rules that organise how the contest functions, guide the actions of the contestants, teachers, judges and viewers (permitted actions, prohibited actions, compulsory actions), and determine the conditions of winning (how to win) and losing (how to lose) as well as the design of the contest difficulty.

Both «OT» and «Fama» are complex and contradictory texts. On one hand, they convey and legitimise a naïve definition of fame: stars as unique individuals, chosen by the public for their talent and effort. And on the other hand, they reveal the mechanisms involved in the manufacture of fame.

This analysis protocol was applied to a corpus made up of audition episodes, daily programmes and weekly shows of «OT 2008» and «OT 2009» (Telecinco)⁴ and the first season of «Fama» (Cuatro)⁵.

3. Results

This section summarises the main results of the analysis of «OT» and «Fama» using the methodology outlined in the previous section. For reasons of clarity, the section has been arranged thematically, relating the results of the semio-narrative, formal (narrative form and audiovisual style) and ludic analyses.

3.1. Professional success as the object of value

In «OT» and «Fama» professional success is the object of value (main OV) pursued by the participants and prescribed to the viewers. Significantly, these programmes equate professional success with fame, that is, public recognition and renown. It is also represented as a form of personal fulfilment and as a way of rising socially and economically.

Therefore, the applicants/contestants are identified as incomplete characters because they have not yet achieved professional success (they cannot work as a professional singer/dancer and/or they are not

famous). «OT» and «Fama» are presented as «institutions» able to give the contestants the necessary competencies for achieving it. Consequently, participating in the contest and winning it are the instrumental objects of value. However, in the programme's discourse a direct relationship is established between achieving the instrumental and the main OV, so that the importance is transferred from the second to the first. This is made clear in the auditions, in which it is shown that for the applicants getting onto the programme (and winning it) is in itself a dream.

In the audition episodes, the long queues, the

In both programmes analysed, success does not only depend on talent and effort, it is also a question of appearances (physical appearance and the way of dressing and speaking). Therefore, we can relate «OT» and «Fama» to the concept of «phantasmagoric labour» (Sternberg, 1998), that is, the importance of appearances in the current work environment and the need to apply «branding» strategies to individuals.

inclusion of applicants with no talent in the final editing and the diversity of applicants and contestants in relation to social class, education, habitat, sex, and, to a lesser degree, age⁶, conveys the idea of democratic and universal access to the opportunity of obtaining the instrumental (and main) OV. However, only a small number of applicants can become contestants and only one of them will win the contest. Therefore, while everyone has the opportunity, only the «best» can obtain the OV.

The audition episodes also legitimate the main, and especially, the instrumental OV and load them with positive connotations, which also helps to legitimate the actual programme. In order to do this the process for selecting the contestants is based on a ritualised structure of rounds, tests and verdicts that maximises the applicants' emotional responses, which are emphasised in turn by the narrative form and audiovisual style: close ups, extradiegetic music, slow motion, internal focalisation with respect to the participants to generate intrigue, superimposed texts and narrative dilation.

3.2. Methods prescribed for obtaining the object of value

Once the contestants have been selected, their transformation process begins. This is carried out in two ways: training and education (improving their dancing and singing abilities), and «celebritisation» (their construction as stars to gain popularity and commercial value). These are the two «solutions» prescribed by these programmes for achieving professional success.

3.2.1. Training and education

«OT» and «Fama» are not just simple talent contests; their objective is to transform the participants through training and education. Significantly, both formats use a school-related vocabulary to name the spaces and the activities performed by the participants. Below we outline the values that guide this dimension of the programmes.

Firstly, effort and sacrifice. The design of the academy/school is significant. In this space there is no strict separation between the spaces for the contestants' personal life and those for their professional life. The extreme case is «Fama», in which any room can become a rehearsal area, which shows how the professional sphere expands and colonises the personal space. In addition, the contestants have to bear a large work load (especially in «Fama»), which is emphasised in the daily summaries thanks to their serial structure and a plot centred on classes and rehearsals. Finally, the isolation the participants are subjected to during the contest suggests the sacrifice of the personal and family life in favour of the quest for success.

Secondly, constant pressure. This is often disguised as the expectations the teachers place on the participants, so that disappointment is usually invoked when a contestant does not reach the required level. For example, in «Fama» this constant pressure is evidenced by the contest rules, which do not take into account the progressive increase in difficulty and are the cause of «the curse of the newcomers»⁷. At the same time this pressure provokes emotional responses in the participants (shown and emphasised by the narrative form and audiovisual style), which once

again serve to show the importance that the instrumental (and main) OV have for them.

Finally, discipline is another characteristic element. The participants must obey the teachers' orders and the judges' comments (which are often humiliating) without questioning them, not even in private given that they are under constant video-surveillance and are also evaluated for the attitude they show in their «private life». In this way a strong inequality is established between the teachers/judges and the contestants, especially when the participants do not have any control over their own training process and their public image and identity as a dancer or singer. Both programmes impose on the contestants which pieces they will interpret, the attitude they should adopt on stage, how they should move and how they should dress.

This leads to an ambiguity in the roles assigned to the characters: although it could seem that in the plot of «OT» and «Fama» the contestants play the role of subject of doing (heroes)⁸, in reality these programmes focus their attention on «the hero's journey» (which is a narrative subprogramme that tells how the contestants achieve the competences necessary for becoming the subject of doing), while the main narrative programme of the story (in which the contestants, transformed into heroes, obtain the main OV) is omitted. This also reinforces the confusion between the instrumental OV (winning the contest) and the main OV (becoming a star).

3.2.2. «Celebritisation»

As well as training, «Fama» and «OT» use another method for transforming the contestants: representing them as stars⁹ (celebritising them).

First, this means portraying them as extraordinary people worthy of admiration. For example, in «OT» this is done in the weekly shows, in which the contestants demonstrate their remarkable singing abilities that differentiate them from ordinary people. The contestants' physical appearance and televisual representation are also exceptional: dressed up and made up like stars the contestants perform in a space designed to mimic a pop concert, with an elaborate and spectacular set design and visual aesthetics. This reference is not trivial, given that concerts are a ritual in which fans can show their commitment to the singer they admire, and the singer can establish a more direct and emotional relationship with their fans (Marshall, 1997: 158-159). Significantly, below the stage on which the contestants sing there is a large pit full of spectators standing up. Thanks to this stage design, the contestants are shown acting for an enthralled audience, who

surround the stage and raise their hands towards them, which they also do when the contestants cross the bridge to the judges' area. This is a way of representing the visibility gained by the contestants (we see them being watched and admired)¹⁰.

The weekly shows and live performances show the unique and extraordinary qualities of the contestants, but «OT» and «Fama» also include contents that try to answer the question of what the contestants/stars are «really» like (Dyer, 1986: 8-18). Therefore, the contestants are also portrayed as «normal» people (constructing in this way the ordinary/extraordinary dialectic on which the discourses on stars are traditionally built (Dyer, 2001: 55-68; Marshall, 1997: 79-94).

This is done mainly through the daily programmes, which show the everyday life of the contestants in the house/school. In these programmes we see everything that is hidden behind the performances (rehearsals, suffering, nerves) with the aim of showing the hidden side of the participants in order to enrich the public image created in the weekly shows (they have an equivalent function to gossip magazines). In this sense, it is significant that the aesthetic conventions of «Big Brother» are used to emphasise the authenticity of the images and that the contestants' feelings are revealed through confessions. Both in «Fama» (in the diary room) and «OT» (in the videoblogs on the programme's website), the contestants express their feelings or they communicate with their fans through monologues, establishing an intimate relationship with the viewers based on the expression of «authentic» emotions (Aslama & Pantti, 2006).

Finally, another way of «celebritising» the contestants is to construct the model viewer as a fan. Firstly, this is done through the game rules: the voting is in favour of the contestants (to save them, not to evict them), and therefore appeals to their followers (this happens in «OT» throughout the entire programme and in «Fama» in the last part of the contest). Second, the structure of the programmes, with contents that spread over different time slots and the Web, constructs a model viewer that gathers information to create a consistent identity of the two sides of the contestant (on and off the stage). Finally, the repercussions the programmes have in the outside world are included in the text, showing images of fans that go to CD signings and performances, yelling, holding up signs and wearing T-shirts with supportive slogans. In this way the programmes try to go beyond the limits of the pure textuality on which the contestants are «celebritised».

3.2.3. The formula for success

These programmes establish a dialectic/tension between talent and popularity as the foundations of professional success (in this case of a singer/dancer). It is in the contest rules where these tensions are shown most clearly, specifically in the power shared by the judges/teachers (guarantors of talent) and the viewers (indications of popularity).

In «OT» there is a self-conscious and reflexive discourse on this dialectic, given that the programme's rule design facilitates conflict between these two poles. The decision about the contestant's future is shared by four groups of characters who use different criteria: the judges, the teachers, the contestants and the viewers. Consequently, disagreements are constantly arising between them. Therefore, although the characteristics that identify a good singer seem clear (be in tune, interpret correctly, vocalise, have a unique style, be versatile, have charisma), the balance that should be established between these is less obvious, especially in relation to the need to be competent at the vocal level and have the «x factor» necessary for generating fans (which is not necessarily linked to the first). It is through the game rules that «OT» tips the balance in favour of this second element: although mechanisms are established so that the judges and teachers can safeguard talent, the rules give more power to the audience, for example, through the figure of the public's «favourite», who cannot be nominated by the judges, or the system for choosing the finalists and the winner, in which the judges have no power at all. A good example of this is Virginia, who won «OT 2008» after overcoming numerous nominations and the explicit opposition of the teachers and some of the judges.

However, in «Fama» there is an attempt to present talent and popularity as causal: popularity is a direct consequence of talent and work. In this programme the teachers are also judges and have a lot of power (they can nominate and evict contestants), while the viewers vote to evict contestants, which makes it easier for the worst dancers to be eliminated. Only in the last week is all the power given to the audience to choose their favourite dancer. However, this does not prevent disruptions and conflicts from arising within the programme; an example is Paula and Jandro, who reached the final thanks to the audience vote although their dance technique was not as good as the rest of the finalists.

4. Discussion

In «OT» and «Fama» professional success is directly related to public recognition, and anonymity is

represented as a problem that needs to be solved. Therefore, fame is prescribed as a life aspiration and the programmes legitimise the idea that «being famous appears to offer enormous material, economic, social and psychic rewards» and that stars are at the «centre» of things, so that «if you are not famous then you exist at the periphery of the power networks that circulate in and through the popular media» (Holmes & Redmond, 2006: 2).

The two programmes tell the story of the metamorphosis of ordinary young people into stars, and apparently they both enter completely into the debate on the democratisation of fame implied by reality TV (Holmes, 2004a, 2004b, 2006; Bennett & Holmes, 2010; Turner, 2004: 71-86). Although the traditional definition of a «star» is based on a combination of talent, hard work and luck, programmes like «Big Brother» disassociate fame from work and talent (Biressi & Nunn, 2005: 144-155). However, «Fama» and «OT» are based on this conventional definition and this is, perhaps, one of the reasons behind the great acceptance of this format (Cáceres, 2002).

The fact that the reality TV shows analysed adopt the traditional definition of fame leads us to identify two more values. First, the representation of a meritocratic society, in which there is an equal access to opportunities but an unequal result in function of talent and effort. That is, anyone, thanks to luck, talent and hard work, can be a star, but at the same time the need to have talent limits the possibilities of success (Marshall, 1997: 79-94). Second (and linked to the meritocracy), stars are paradigms of the individualism on which capitalist societies are based: they are individuals with power and freedom who have arrived to where their talent and work has taken them independently of their origins.

However, in «OT» and «Fama» this emphasis on meritocracy and individualism is made compatible with the subordination of the participants: they have little power within the plot (remember that they are still not «heroes») and a strong inequality is established between them and the other characters of the programme (teachers, judges and viewers). In conclusion, these programmes do not value the individual entrepreneur as much as the «good worker» who is capable of adapting without complaining to the demands of a changing work environment, which calls for constant updating and reinvention (Ouellette & Hay, 2008: 99-133). Therefore, although the programmes promote the idea that each participant needs the «x factor» which marks them out from the rest, their objective is to model the contestants. Therefore, these program-

mes enter the debate on authenticity and artifice that hangs over the concept of stardom (Marshall, 1997: 150-184; Gamson, 1994: 40-54).

In fact, both «OT» and «Fama» are complex and contradictory texts. On one hand, they convey and legitimise a naïve definition of fame: stars as unique individuals, chosen by the public for their talent and effort. And on the other hand, they reveal the mechanisms involved in the manufacture of fame (following the current trend in the media identified by Gamson, 1994: 40-54). Thus, these programmes allow a distanced reading of fame and its generation process and, at the same time, they can create stars.

In relation to work, as well as being an opportunity for social mobility (which is also related to fame), work is represented as a means to self-fulfilment, and the programmes suggest that to be successful you must devote all your energy and sacrifice your personal life. In fact, the two programmes analysed propose a «return to authority», where discipline is the best way of achieving professional goals¹¹. Although the emphasis on effort and discipline can be viewed positively, we can also identify a danger: the approach to work prescribed is that of the romantic ideal of the artist, which «provides an ideal rationale for encouraging labour without compensation» (Hendershot, 2009: 249-250), so that «the passion of work is presented as substitute for material compensation, security, pension plans, and so on» (Ouellette & Hay, 2008: 130)¹².

Finally, in both programmes analysed, success does not only depend on talent and effort, it is also a question of appearances (physical appearance and the way of dressing and speaking). Therefore, we can relate «OT» and «Fama» to the concept of «phantasmagoric labour» (Sternberg, 1998), that is, the importance of appearances in the current work environment and the need to apply «branding» strategies to individuals (Ouellette & Hay, 2008: 99-13; Hearn, 2006). The two programmes analysed go into this aspect in depth: the participants are stars because they look like stars. This emphasis on the construction of a marketable image is directly related to the adaptability of the «good worker» mentioned above: it is in the area of appearances where this continual renewal can take place more easily.

In summary, «OT» and «Fama» reveal some of the tensions involved in the current work market. First, work is represented as a form of personal fulfilment and a way of moving up the socioeconomic ladder, and fame is a measure of success and a life aspiration. Second, these programmes convey a meritocratic vision of society in which each individual's destiny is

determined by their talent and effort; however, they also advocate the importance of constructing an image that could compensate for the lack of these. Finally, they define obedience and adaptability as desirable qualities in the workplace, while at the same time promoting the pursuit of uniqueness and individuality.

Notes

¹ Reality TV shows that combine the features of documentaries, TV series and contests. The subgenre was born at the end of the 90s with «Expedition: Robinson» (Sweden, SVT, 1997) and «Big Brother» (Netherlands, Veronica, 1999).

² The analysis protocol can be consulted in Oliva (2010: 183-191).

³ The model viewer is the viewer planned and created by the text: «A text is a product whose interpretation should form a part of its own generative mechanism: to generate a text means applying a strategy that includes the forecasts of the movements of the other» (Eco, 1981: 79). Obviously, an empirical viewer could interpret a text in different ways to the one proposed, but this type of interpretation is not considered in the present study.

⁴ «OT 2008»: weekly show 8 (03.06.2008), 11 (24.06.2008) and final show (22.07.2008). «OT 2009»: «El casting» (19.04.2009 and 26.04.2009), weekly show 0 (29.04.2009), 1 (06.05.2009) and the daily summaries of the third week (14.05.2009-20.05.2009). The rest of the weekly shows of the two editions have also been viewed.

⁵ Audition episodes: Madrid (26.12.2007), Valencia (01.01.2008) and Final audition (06.01.2008). Daily programmes: week 1-2 (07.01.2008-16.01.2008); week 9-10 (05.03.2008-11.03.2008) and the last week (21.04.2008-25.04.2008). Weekly shows: show 2 (30.03.2008), semifinal (27.04.2008) and final (28.04.2008). The rest of the shows of the first season have also been viewed.

⁶ Although only young people can participate in these programmes, the audition episodes include adult applicants.

⁷ The new couples that join the programme cannot keep up with the imposed rhythm and are eliminated, with few exceptions, a week after entering the programme.

⁸ See Cáceres (2002), an article that analyses «OT» as the story of a «quest».

⁹ It is important to remember that the present analysis is confined to the limits of the text, and does not analyse the effects the programmes have in the real world (that is, fame as the effect of media representation).

¹⁰ Part of the importance and significance of this set is constructed by the long path the contestants in the auditions need to follow, which portrays the story of the journey from anonymity (invisibility) to popularity (visibility).

¹¹ The legitimization of authority and discipline is also a fundamental aspect of other contemporary reality TV shows like «Supernanny», «Hermano Mayor», «Ajuste de Cuentas» and «Cambio Radical». See Oliva (2010).

¹² This can be related to the labour exploitation allegations made by Víctor Sampedro (2002) in relation to these programmes.

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Uses of Digital Tools among the Elderly

Usos de las herramientas digitales entre las personas mayores

ABSTRACT

A «multiage» society needs the design and creation of new areas of learning and communication to manage the digital demands of the elderly. In this article, the relation of the elderly to information and communication technologies (ICT) is approached and two objectives are considered: to discover the technological resources they use and to objectively describe the types of usage that senior citizens make of ICT. To that end, a survey technique is used, with the results validated by means of discussion groups. The study participants consisted of 215 elderly people, all ICT users, and 7 discussion groups of 5 people each. The results indicate that the resources most widely used by the elderly are computers and the Internet, and the type of usage is grouped into 4 categories: education, information, communication and entertainment. There were no significant differences in gender or age although differences were found in the availability of these resources for private use based on the level of education.

RESUMEN

Una sociedad «multiedades» supone diseñar y crear nuevos espacios de aprendizaje y comunicación, capaces de gestionar la demanda existente por parte de las personas mayores. En este artículo, se aborda la relación de las personas mayores con las tecnologías de la información y la comunicación (TIC) y para ello se plantean dos objetivos: el primero va dirigido a conocer los recursos tecnológicos que utilizan y el segundo, a describir objetivamente los tipos de uso que estas personas hacen de las TIC. Para ello, se utiliza la técnica de encuesta, cuyos resultados son contrastados mediante grupos de discusión. En el estudio participaron 215 personas mayores usuarias de las TIC y siete grupos de discusión de cinco personas cada uno. Los resultados encontrados indican que los recursos que más utilizan los mayores son, los ordenadores e Internet y el uso que hacen de los mismos se ha agrupado en cuatro grandes categorías: formación, información, comunicación y entretenimiento, no encontrándose diferencias significativas en función del género o de la edad y sí se encontraron diferencias en cuanto a la disponibilidad de dichos recursos para uso particular en función del nivel de estudios.

KEYWORDS / PALABRAS CLAVE

Learning, active aging, cognitive stimulation, digital divide, digital literacy, elderly people, healthy living.

Aprendizaje, brecha digital, cultura digital, envejecimiento activo, estimulación cognitiva, mayores, vida saludable.

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1. Introduction and review of recent history

The aging of the population in the European Union is an undeniable fact, with more and more people reaching pensionable age by the year. According to the report «The elderly in Spain, 2006» (Institute of Migrations and Social Services), the number of people aged 65 or over was approximately 7.3 million, which represents 16.6% of the population. The forecasts of the United Nations for 2050 state that Spain will have the highest number of elderly people in the world, with more than 16 million, that is to say, more than 30% of the projected total population. In 2009, the life expectancy of Spanish women was 84.1 years and 77.8 years for men, making Spain one of the leading countries in longevity.

As Montero argues (2005: 36), if the 19th century was characterized by an «excess of life» (high birthrate and high mortality), the 20th century has seen the end of the demographic transition, the revolution of longevity and aging. The challenge for the 21st century will be to make longevity compatible with personal autonomy and social participation.

This phenomenon of the aging population has not gone unnoticed in Spanish society, and in recent years social pacts have been made at state and regional levels (National Gerontological Plan, 1992-97; State Council for the Elderly, 1995; Plan of Action for the Elderly, 2000-05; 2003-07), projects and programs (University Programs for the Elderly), with the aim of fomenting social protection, associationism and the participation of the elderly in society.

The exhaustive exploration and study of the aging process (through biology, medicine, psychology and education) allows us to understand and promulgate old age as a stage of life, with all its possibilities and limitations, like any other. In the aging process, attitudes are very important but so too are the actions to promote active aging. The World Health Organization (2002) defines active aging as the process of optimization of the opportunities of health, participation and security with the purpose of improving the quality of life in people as they get older. Active aging not only includes physical and mental health, but also participation in society and social integration, clearly establishing the rights of the elderly as citizens.

Getting old is not confined to a specific moment in life; aging is part of the sequence of human development, and so, considering old age as an on-going process paves the way for action and breaks down prejudice. The environment in which people grow up, live, socialize and relate appears as a key element throughout life. Surroundings rich in stimuli and possibilities

provide a healthy lifestyle which in old age is a source of satisfaction and quality of life. For that reason, it is necessary to create new models and action strategies to promote the understanding of old age as just another stage of people's lives, a period of growth and personal enrichment in which to learn with the help of ICT, which is an aspect for which the society must be prepared. As early as 1986 the European Commission's «FAST Report» warned of the dangers of technological innovation without parallel social innovation. Social division between different countries and within then is a clear example of the consequences.

Digital divide is the term used to express this idea. It quantifies the difference between countries, sectors and people that have or do not have access to the instruments and tools of information and the capacity to use them. As can be observed, it is a wide-ranging term with differences according to the context in which it is analyzed (economic, social, technological, etc.), but with the same intention: to explain why some countries, people or groups have access to the technologies of information and communication while others do not. This multidimensional character that defines the digital divide shows that it is a phenomenon that is neither quick nor easy to solve. However, there is absolutely no doubting the need to reduce these differences in favor of a society for all. ICT offer formidable opportunities for all members of society but it is necessary to know the needs and interests of all its citizens regardless of age to bring people and technology together.

Juncos, Pereiro and Facal (2006: 184-185) state that the use of communication technologies by the elderly leads to great possibilities of intervention (Charness, Parks & Sabel, 2001). Both in normal aging and in exceptional cases, ICT allow us to design cognitive training programs relating language, attention, memory and reasoning, and specific programs for speech therapy. ICT enable interactivity and feedback, offer security to the users due to their consistency, and many possibilities for expansion through their versatility, allowing users to enjoy a wide variety of visual and auditory stimuli. This favors the connection and the approach of the elderly to the new subjects and phenomena arising in society (social inclusion). Access to innovation and the new technologies is essential to avoid generational distancing and so that the elderly do not feel ousted from today's world.

To age does not mean losing the capacity to adapt to change nor a desire to live in the past. Juncos, Pereiro and Facal (2006: 185) affirm that in the normal aging process access to computers and the Internet

can contribute to the development of new social links, new windows on to the world and new tools of communication and activities of cognitive stimulation; it can also permit access to culture and permanent education and involvement in activities of social cooperation. To that end it is necessary to offer the possibility of education in the specific competences that ICT require and their appropriate usage. The way in which this educative process is carried out is crucial for the incorporation of senior citizens into the digital culture. In this sense, Huelves (2009: 56-77) mentions some elements that must be considered when developing digital competences in the elderly. These elements are: memory, especially at the time of recovery, for that reason a spiral methodology is a good strategy to use; psychomotricity, considering some guidelines on posture ergonomics in relation to the machine; development of learning, demonstrating patience and comprehension.

Studies carried out in Spain to learn what use the elderly make of ICT are few and far between, and for that reason our research objectives concentrate on discovering and describing the types of use that the elderly make of ICT, and the technological resources they mostly use. The hypothesis is confirmed: the access to and use of ICT among elderly people is positive since they are used in activities related to communication, information, education and leisure: everyday activities that provide new opportunities for relating to other people.

2. Material and method

The design of the research is a descriptive study whose objectives and methodology respond to paradigmatic complementariness given the nature of the phenomenon studied, which is largely unexplored, changeable and dynamic. The participants in the study consisted of 215 elderly ICT users from the Spanish region of Asturias who regularly frequent social centres for the elderly.

The research uses two instruments for data collection taking into account methodological complementa-

riness: a survey oriented to the gathering of information on the technological resources most widely used by the elderly and the usage they make of them; discussion groups that complement, contrast and enrich the data extracted with specific experiences and examples of ICT use.

The SPSS tool of statistical analysis and data processing (version 12.0) has been used for the analysis of the quantitative data. The analysis is fundamentally, a

Society has opened up spaces for the elderly to become digitally literate and they (although still not many) approach ICT with the main intention of learning about how they function (digital literacy) and to acquire the necessary basic competences for managing and using them for their particular needs, which will lead them to acquire computer knowledge and enjoy using that knowhow. This research shows that the elderly use ICT as a form of education; that these generations of the elderly need and want to learn, and see this moment in their lives as the right time to approach ICT.

study of two variables with the application of statistical decision tests: Pearson's Chi-squared test, Phi coefficient, Pearson's coefficient correlation, Goodman's Lambda coefficient and the factorial analysis of variance (ANOVA).

3. Results

The results demonstrate that the elderly are a heterogeneous social group, and the ways in which they use ICT are related to necessity and individual interests.

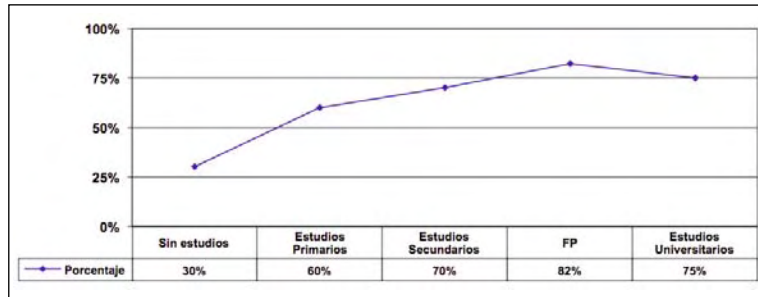
3.1. The technological resources most widely used by the elderly

The computer is the most widely used information technology (68.8%), followed by the Internet (50.7%), resources which are normally used in public spaces (52.15%). The results also show that elderly people with a higher level of education have greater private

Availability of resources and level of education	Value	gl	Sig. Asymptotic (bilateral)
Chi-square	17.498	6	.008

Table 1. Pearson's Chi-squared test for the availability of computer resources for private use and level of education variables.

use of information technology (in the home). The results of the χ^2 test reveal a significant association between the level of education and the availability of the information technology for private use.



Graph 1. Elderly people with private access to information technology according to level of education.

Graph 1 shows the difference between people who have private access to information technology according to their level of education.

The higher the level of education, the greater the access to computer resources. Significant relations regarding gender do not appear, however, as indicated by the Chi-square test [$\chi^2(1)=2.165$, $p>.05$], verified by the zero result of Goodman's Lambda = 0.000. The table of contingencies is as follows.

There are no significant associations with regard to age [$\chi^2(4)=5.663$, $p>.05$], marital status [$\chi^2(3)=6.646$, $p>.05$], type of cohabitation [$\chi^2(1)=1.599$, $p>.05$] and place of residence [$\chi^2(2)=1.165$, $p>.05$].

The most common information technology that elderly people possess for their private use is the computer (16.7%), and it is significant that 9.8% also have other ICT resources: printer, scanner, digital camera, digital video camera, multimedia materials and the Internet.

The level of education variable is also significant for access to other technological resources for private use, such as the mobile telephone. The higher the level of education, the greater the number of technological resources possessed by the participant.

The biggest differences are between the elderly who have no educational qualifications (68%) and those educated to, for example, primary school level (93%) or secondary school level (96%).

3.2. The use that the elderly make of ICT

The percentages are very clear with regard to the use that the elderly make of ICT: 66.1% cite educational activities: courses and workshops related to ICT (computer science, the Internet, digital photography, etc.), followed by 47% who search for information, as opposed to 18.7% who use ICT for entertainment, while 24.9% use it to communicate. These usage patterns do not differ greatly from those of other collectives or age groups. However, there are certain particularities which are described below.

3.2.1. Education

Nowadays the elderly tend to approach and use ICT for the purpose of learning about them (digital literacy) and in so doing

they acquire the basic competences needed to manage and use these resources that will enable them to learn and enjoy using them.

Significant associations between the personal and social-demographic variables do not occur, for example, the data show that gender does not generally influence enrolment on ICT-related courses and workshops. Men and women in equal number undertake this type of activity, mainly face-to-face in a computer science classroom with the guidance of an instructor. This is an aspect which we value positively in as much as this does not occur in other age ranges, as confirmed by Gil-Juárez, Vitores, Feliu and Vall-lloven (2011: 25-53), and although we can state that men and women have equal access to computer resources, inequalities become clear or even increase for the uses and knowledge of different types of ICT. Age being $p>.05$ is not a determining variable either, and the Phi

	Gender			Total
		Male	Female	
Availability of computer resources for private use	Yes	83	53	136
	No	39	38	77
Total:		122	91	213

Table 2. Table of contingencies for the gender variable and availability of computer resources for private use.

coefficient value is .089. Other variables that are not significant include marital status, the level of education, the type of cohabitation and the place of residence.

More and more elderly people are getting involved in information technology, which shows that it is possible to learn at any age and that their will to continue learning means that education is not limited to specific stages of life. To learn is to live, and learning fosters creativity, increases self-esteem, exercises the mind, etc. This is a guideline to consider when promoting the positive aspects of aging. In the words of Belando (2000: 37), quoted by Limón and Crespo (2001: 302-305), it is necessary «to look for new goals, new reasons for satisfaction and pride, a means to achieve happiness in this stage of life. Anchoring oneself in the past will only restrain development and accelerate decrepitude». Setting oneself the challenge to learn something new, in this case handling ICT, is a challenge, a new goal.

Simply learning to use the keyboard and the mouse means the acquisition of new skills. The functions require coordination, agility and natural automatism achieved through learning, as in handling the mouse, which requires correct and comfortable usage in a flowing but simultaneously paused movement, with the appropriate pressure applied to click on the left or right button, and control to drag and drop elements. Correct use of the keyboard requires the user to press specific keys, locate letters, manage cursors, find symbols, in short, it requires the development of different degrees of pressure and coordinated movements.

The data analysis confirms that the elderly generally attend ICT-related face-to-face courses and workshops specifically oriented towards their needs, as part of educational plans for senior citizens run by regional governments or city councils.

In response to the question «how did you learn to use ICT?» 60% indicated computer science courses and workshops; «where?» yielded a 96.7% response in favor of social centres for the elderly.

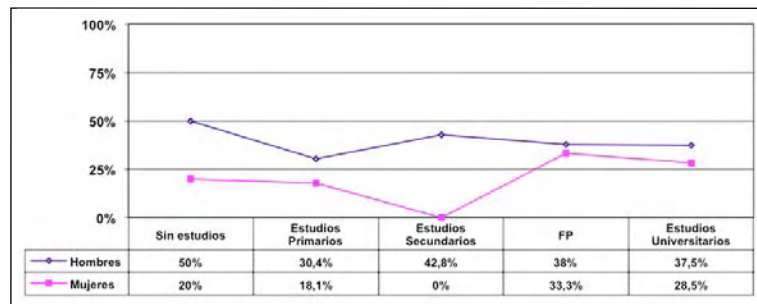
It is noteworthy that 29.6% of the elderly state that they use the Internet for educational purposes. The results from the χ^2 test indicate that there is no significant association for age [$\chi^2(12)=10.977$, $p>.05$], marital status [$\chi^2(9)=7.760$, $p>.05$], place of residence [$\chi^2(6)=9.717$, $p>.05$], type of cohabitation [$\chi^2(3)=6.113$, $p>.05$], gender or level of education, as seen in Graph 2.

The data show that women carry out this activity

on the Internet to a lesser extent than men, with the greatest contrast between both sexes at the level of secondary school education.

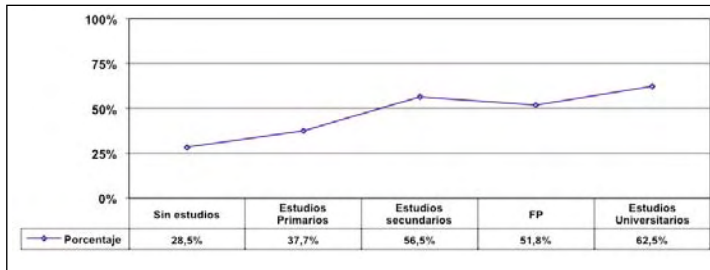
3.2.2. Information

Access to information is another of the common uses that the elderly make of ICT which is unsurprising when referring to the Information Society we live in (Castells, 1995). Information is now an essential resource for human activity, both socially and personally, and the elderly, as part of our society, also perceive computer science to be one of the great historical revolutions. «There is absolutely no doubt... computer science is, I believe, one of the most important revolutions of human life. Why? Because it has united the world. That is true globalization [...]. And I always like to be involved in non-violent revolutions... and then I got very interested in everything that it can offer me. Above all, information. I have access to immediate, trustworthy information when I know how to look for it and use it, and I am using it every day. Then the advantage is immense... it expands knowledge, the consciousness, and that is what we need [...]» (H).



Graph 2. Elderly people who use the Internet for educational purposes according to level of education and gender.

The Internet constitutes an immense source of information of all kinds: texts, photographs, graphics, music, videos, animations, computer science programs, etc., all stored on PCs connected to the Net and structured in diverse formats, such as Web pages, files, discussion forums, noticeboards, etc. Miranda de Larra (2004: 21) indicates that the elderly are generally interested in the same subjects as the rest of the population, but also in information with special relevance for their stage of life (pension payments, health, etc.), hence they demand that this type of information be made more and more accessible on the Internet. Electronic transactions are particularly useful for the elderly who are restricted by poor health or physical disability. The same applies to online shopping and banking for those with mobility restrictions or limited



Graph 3. Elderly people who often use the Internet according to level of education.

transport options. «Do the elderly habitually use the Internet?» Not all elderly ICT users go on the Internet on a regular basis, in fact 40.1% do not habitually use the Internet as opposed to 59.9% that do. Age, gender, type of cohabitation and place of residence are not decisive indicators in the frequency of Internet use by the elderly.

In relation to level of education the χ^2 test yielded $p < .05$ which implies a significant statistical association between frequency of Internet use and level of education. The percentages are shown in detail in Graph 3:

As can be observed, it is the elderly with secondary school-level education (56.5%) and university degrees (62.5%) who show make greatest use of the Internet, followed by those with vocational training (51.8%), primary school-level education (37.7%) and lastly those with no educational qualifications (28.5%).

Data relating to Internet use, the level of education and gender are interesting in that they emphasize the significant difference between men and women with no educational qualifications. Elderly women who left school with no qualifications (although not illiterate) make the least use of the Internet. This is important for the design of political strategies and social programs whose aim is to promote Internet use among this segment of society. In today's society it is essential to promote women's access and use of ICT as an empowerment measure, as stated at the Fourth World Conference on Women in Beijing (ONU, 1995). Empowerment means 'the full participation of women in conditions of equality in all spheres of society, including participation in the processes of decision-making and access to power' in Beijing (ONU, 1995). In relation to ICT, this requires the improvement of skills, knowledge, access and use of these resources. ICT use and application is much more apparent in the elderly women with a higher level of education.

«Why do the elderly use the Internet?» The main reason is to

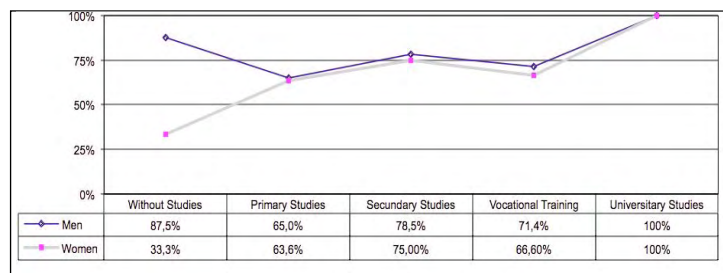
search for information, and they indicate that they do it often (35.5%) or a lot (27.9%). The least common activity is electronic banking (not at all: 80.2%) and administrative procedures (not at all: 82.6%). Those with a secondary school or university level of education use the Internet most often to carry out administrative procedures.

The elderly use the Internet especially to access information and are interested in the news and current affairs (reading newspapers online). «I, for example, lived in Germany for 9 years [...] here I download a newspaper that I used to buy there [...] and I flick through it almost every day [...] there are advantages everywhere, it's true» (H).

Accessing information can be beneficial for the elderly (preservation of cognitive capabilities, increase in the sense of integration in society, opportunity to learn, among others) and can be a source of immense personal satisfaction. According to a recent study (Small, Moody, Siddarth & Bookheimer, 2009) by the University of California, Internet searches stimulate and improve cerebral functioning by activating the main centres of the brain that control decision-making and the capacity to perform complex reasoning.

3.2.3. Communication

The value of communication is the same for anybody regardless of age, and is one of the fundamental pillars of life. We habitually communicate with other people and use different means to do so, and in this case 24.9% of elderly ICT users indicate that they use the Internet to communicate. There is evidence from the Chi-square test [$\chi^2(9)=18.066$, $p < .05$] to confirm that marital status influences communication by Internet, particularly its use among unmarried elderly men and women, and women in particular, as the following chart indicates.



Graph 4. Elderly people who often or sometimes use the Internet according to level of education and gender.

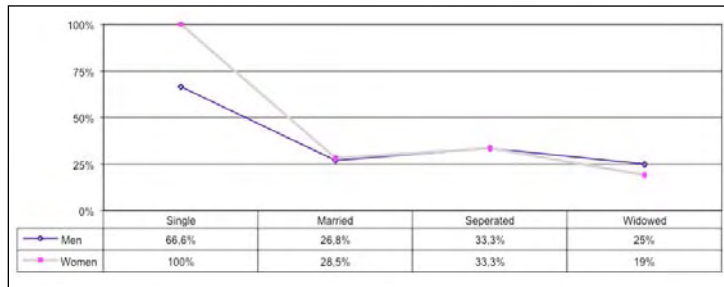
The elderly who participated in the discussion groups state that the Internet is a useful means of communication and that they often use it. The positive aspects of Internet use are that users can maintain a closer relationship with the family. One of the participants said: «It means everything to me, to communicate with the family... just the other day a niece that had recently had a baby showed us it on a Webcam» (H).

Contact with other people, especially relatives (children and grandchildren), is the type of use that stands out most. In this sense, Internet usage foment

tunities for educational and constructive leisure for the elderly, as it is for other age groups. Opinions on ICT use for entertainment vary: «For me it's just a little entertainment like any other» (H). «There are things I don't need [...] what do I need this for? [...] Now for me the computer is just a hobby» (H).

Given the opportunities that ICT offer, it is difficult not to find a moment in which to enjoy them. Different ways for using them as a source of entertainment are: «Here for example, I believe that what we most use it for apart from the local rag [...] is to make

Powerpoint presentations, above all at Christmas, we send emails with presentations, then send them to each other and then there are others that sends us theirs [...] then we do things with photography, the ones that have got grandchildren are those who are most into it, for example it's a thing that I like most, and what I «spend most time on» (H). «I do a lot of photographs [...] then I make a video [...] it's something that I really like» (H). «Photo-



Graph 5. Elderly people who use the Internet to communicate according to marital status and gender.

intergenerational relations, so important for health and well-being. «I remember that the first mail that I sent I sent to my 'kid'... seeing that he answered me in just a few minutes made me think... and today I am 'ever so pleased' that I 'got into it', now I have a computer at home, I have connection to the Internet... and when he is away we keep in very close contact, see each other through a Webcam, chat ... if I hadn't 'been and done' it, I don't know, I'd be as bored as I don't know what, and yet now there are times when I don't have enough time» (H).

This two-way interaction in which both parts are involved in the communication relationship has positive effects for the elderly (increase in self-esteem and motivation, development of skills, especially social skills, escape from isolation, etc.) and is a reason for personal satisfaction.

3.2.4. Entertainment

The elderly people who took part in this research also use ICT to entertain themselves (18.7%), and this encourages an openness to alternative forms of leisure, personal enjoyment and self-fulfillment.

The Chi-square test indicates that age, gender, marital status, educational level, type of cohabitation and the place of residence are not determining variables in the use of the ICT as a source of entertainment. This area is still unexplored, with many oppor-

shop is also great, very entertaining and very pretty at the same time because it is possible to do many tricks with a photograph and that's wonderful» (H). «I have a group in Latin America and we are continuously in contact [...] you learn how they think in other places [...] for me, personally it is a very great inner satisfaction» (H).

These ideas reveal the wide range of ICT options for entertainment and the substantial changes in the leisure habits of the elderly. As we can see, it is not just about occupying free time to get through the day, but rather an attempt to extend the possibilities for learning, personal satisfaction and enrichment.

«I'm not a person for example who likes bars, there are some folk who love to spend hours and hours there and that is not my cup of tea» (H). «Anything with the computer is always more enriching than playing cards [...] it's much more healthy, more rewarding, more enriching [...]» (H).

Without a doubt, leisure is a factor in quality of life and well-being providing it satisfies needs; the elderly attribute benefits or properties to ICT that make them a self-sufficient leisure activity (Cuenca, 2004: 34-35). Self-sufficient leisure is an important, vital experience, an area of human development that stems from a positive attitude which induces action and is based on three essential pillars: a perception of free choice, an aim in itself and a rewarding sensation.

In one of the discussion groups, one person considered this stage of life (after retirement) as an opportunity to recover lost time, to carry out projects that could not be undertaken during other life stages and to try to do that vital project that was always put off for another time. «I always had all my life a thirst for knowledge. Because all my life I envied those that knew a lot [...] we were four brothers and sisters and I was the only one who had an itch to study [...] but I couldn't [...] now I love learning».

These quotes constitute an important reference for professionals who design programs for the elderly. The new generations of the elderly are independent people, full of vitality, with countless opportunities and with a profile of needs and interests that differ from what we are accustomed to. They look for something more in leisure than a mere human experience, and they want it to be valuable, rewarding and full of meaning. Csikszentmihalyi (2001, cit. Cuenca, 2004: 53) states that it is only possible for people to develop their unique human potential if they enhance their psychological complexity which, according to the author, is the result of two components: integration and harmonious participation with the social and cultural environment. ICT constitute an activity which endows leisure with multiple possibilities for creativity and initiative in the elderly.

As already indicated, the elderly use ICT to make photo albums for their children, digital Christmas cards for their friends, videos which capture special moments, etc. Without doubt these activities involve the elderly in their own life projects, fill them with confidence, satisfaction, life. The effects of learning to use ICT are, without a shadow of doubt, very positive for the elderly who perceive them as tools that enrich, that offer indispensable possibilities for feeling part of today's society. In this respect, comments include: «It is a very good activity and it helps the elderly a great deal... I am satisfied that at my age I can use computer science, I like it very much, I like it because we are with friends and we have a great time».

4. Conclusions

Society has opened up spaces for the elderly to become digitally literate and they (although still not many) approach ICT with the main intention of learning about how they function (digital literacy) and to acquire the necessary basic competences for managing and using them for their particular needs, which will lead them to acquire computer knowledge and enjoy using that knowhow. This research shows that the elderly use ICT as a form of education; that these

generations of the elderly need and want to learn, and see this moment in their lives as the right time to approach ICT. The purpose of using ICT for entertainment, as occurs in other stages of life, is displaced by the urge to access all types of information that can contribute to personal knowledge, except in certain contexts such as rural areas where probably due to the lack of other types of leisure initiatives, ICT are used much more frequently for entertainment.

The preference for face-to-face courses with suitable methodologies and teachers sensitive to their needs is the method preferred by elderly men and women users of ICT.

Another important element to consider is that elderly involvement with the Internet is still low-level since they have not yet discovered all its possibilities in terms of communication and information, or if they are have, they are not interested in taking advantage of them. The data verify that the elderly use the Internet to communicate, especially the unmarried who see this communication channel as a tool that facilitates relationships with others, with relatives or friends and acts as a brake on loneliness. It is also comprehensible that the elderly with a secondary school or university level of education use this resource more whereas elderly women with no formal education use it the least, a fact to be considered when designing social programs that target elderly women with no educational qualifications to get them onto the Internet.

Another significant aspect of the research is that more than half the ICT users access the Internet from public areas, normally social centres for the elderly, since they do not have computer technology at home, which suggests that if they did so, ICT usage would be greater than it is at the moment. In this sense, small grants for people over 65 to buy computer equipment and access to the Internet should be considered, as it has been for young people. All these aspects should be taken into account when designing training programs that satisfy the needs of different groups. Competences already acquired by users should direct the methodologies to be employed in such a way that the use of the digital tools of the 21st century is open to all ages.

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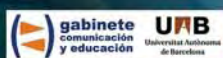
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