Abstract

This research focuses on models and strategies the EU has developed over the last decade in order to deal with these new and changing conditions. This is an important fact due to these strategies also have guided the actions of the European Union in promoting digital and media literacy. In order to understand how it has got to the current position in Europe, we identify and describe the models of literacy (digital and its gradual transformation in media literacy) that have emerged along more than a decade.

Keywords: Digital literacy, media literacy, critical understanding, citizen participation

Resumen. Tendencias y modelos de la alfabetización mediática en Europa: Entre las competencias digitales y la comprensión crítica

El presente artículo se centra en el estudio y análisis de los diferentes modelos y estrategias que la Unión Europea (UE) ha desarrollado en la última década con el objetivo de adaptarse a la nueva y cambiante coyuntura comunicativa y social. Con el objetivo de establecer cómo la UE se ha adaptado a este nuevo panorama, se identifican y describen los principales modelos de alfabetización (desde la digital hasta la mediática) aplicados en los últimos diez años.
Palabras clave: Alfabetización digital, Lectura crítica, educación en medios, participación ciudadana

Summary

Introduction

In just 40 years, media and communication and information tools changed profoundly and its use has spread, throughout the world. The technological innovation is the fastest, complete and comprehensive that has been experienced throughout the history of mankind and it has its implications on our way of life. There is no doubt that the digital media and ICT have become a new “living space”.

People work, establish relationships and spent their leisure time using media and Information and Communication Technologies (ICT). This adaptation depends, in turn, the capacity and powers of the institutions and individuals to obtain the necessary skills and abilities to use them properly as a part of a culture in which is necessary to effort actions towards literacy for all contexts and texts of media and ICT.

This paper develops the process on media literacy from the conception of digital competences to critical understanding intended to present the models that define different trends. For this, we expose media literacy initiatives that face new digital environment and the changes it cause in society and the base set by authorities, initiatives and policies that have driven just a digital literacy towards the media literacy comprehension, beginning with the context and definition of media literacy, tools for the assessment and policies to explain the different models.

New digital context

These processes of “digitization” of every-day life are being promoted by the requirements imposed by the transition from an industrial to an information economy. The consequence is the implementation of the Information Society reinforced by a continued investment in the industry of telecommunications: telephone networks, satellites, etc.
At the same time, is making a tremendous effort in the production, deployment and marketing of technology platforms and tools -as communication terminals inside this new global network that allows users a more productive activity. This has enhanced the availability, which means the potential user can access to all kind of communications technology in every moment.

However, beyond the availability, access depends not only on the technical tools available to people, but a more complex process that imply the capacity of the institutions and individuals for adapted the new technologies. So we talk about digital literacy.

This adaptation depends, in turn, of the capacity and abilities of institutions and individuals to accept innovation and change. They need new skills to face to new technological environment.

This bunch of abilities, attitudes, habits and knowledge related to Information and Communication Technologies (ICT) is named digital skills. And the process -and outcome- of the acquisition of such competences is known as digital literacy, as important as traditional literacy (reading and writing) because involves the efficient control of new ICT.

At first, digital literacy was only considered as the set of technological abilities. However, rapidly was recognized the necessity to acquire a set of skills and practices that included, in addition to operational techniques, cultural elements. That means, for an effective use of ICT is essential to develop a critical thinking and awareness that allow individuals to use the media with a sufficient degree of autonomy.

In order to emphasize the multidimensional and multifunctional nature required by this new digital and media environment the ICT, the concept digital literacy has been moved closer to the comprehensive and general media literacy, in which prevails the idea that ICT provide to individuals of new abilities to live in the new media environment characterized almost entirely by digital media.

The European Commission (EC) is the institution which has advised extends the concept of digital literacy to include it in the media literacy concept. It is the Commission which defined media literacy as “the ability to access, analyze and evaluate the power of images, sounds and messages that we faced daily and which has an important role in contemporary culture.”

**From Digital Literacy to Media Literacy**

The first stage of the European Commission’s policy in relation to the Information Society, from 2000 to 2005 - shows the existence of a double line of force:

a) The emphasis on providing infrastructure and social diffusion;

b) Investment in improvements to allow better capabilities of people, especially youth, through the formal education system, and workers with the objective of extending training throughout life.

However, they will gradually reinforce the priorities for action assuming it is fundamental to increase awareness and empowerment of individuals in relation to ICT. This requires focus on issues such as quality and safety of usage, awareness of the protection and promotion of the personal rights and dignity in the technological environment (especially in regard to the protection of minors) and the critical capacity of citizens to ICT.

In this sense, the Parliament and the European Commission (EC) have played a key role in shaping this new approach. The following named are some of the most important initiatives and actions undertaken by the EC and highlight this new line of action.

One of the most important activities was the study “Promoting digital literacy”2, conducted in 2004 by the Autonomous University of Barcelona (UAB), focused on the identification and analysis of successful and innovative experiences in digital literacy. Beyond the consideration of instrumental and operational aspects, this study recognizes the need to place digital literacy in the broader context of cultural change (towards the “digital culture”).

On the other hand, the consideration of security aspects in the use of virtual networks and aspects related to human dignity and children’s protection were gaining momentum through several initiatives of the Parliament and the European Commission. In this sense, the more suitable Internet, to ensure the protection of minors resulted in several actions. Among them is remarkable, in 2006, the Recommendation on the protection of minors and human dignity.3 In which is make stress in the need to promote media education and media literacy, as the only guarantee of real protection from the challenges of new technologies. In this regard, the recommendation is strengthen the demand for teacher training in media literacy and the inclusion of media literacy in the curriculum with the aim not only to protect the children but also to promote responsible attitudes from all users. It can be read as dimensions that go beyond the instrumental use of ICT that has been incorporated as an essential element in the new policies of the European Commission. Other actions and legal texts broadened the scope of digital literacy. The Recom-

mendation on key competences in lifelong learning and throughout life\textsuperscript{4} identifies the key skills that should be learned: a) digital competence (safe and critical use of technology), b) civic and social competence (tools needed to participate actively and democratically in society), and c) the cultural awareness and creative competence (as a tool for assessing the creative expression of ideas and emotions in the media).

In a similar vein, the Council of Europe (CE) also developed in the 2006 Recommendation on empowering children in the new environment of information and communications\textsuperscript{5} to provide sufficient tools to children and educators for the best use of services and new ICT. The recommendation calls member states to help familiarize children with the new environment of ICT and give them the necessary tools to “create, produce and distribute content and communications.”

In parallel, the European Commission established an Expert Group on Media Literacy (EU Media Literacy Expert Group) in order to analyze and define the objectives and trends of media literacy, highlighting and promoting good practices at European level and propose actions to follow in promoting media literacy. The Group of Experts in 2006 prompted a public consultation \textsuperscript{6}to identify trends on media literacy not only at European level.

A year later, the EC gave in charge the study \textit{Current Trends and Approaches to Media Literacy in Europe}\textsuperscript{7}, which identifies a number of common trends in media literacy in the countries of the European Union.

Subsequently, the Commission announces the Communication “\textit{A European approach to media literacy in the digital environment}\textsuperscript{8}, which emphasizes the need for a regulatory policy that would safeguard “certain public interests, such as cultural diversity, the right to information, the importance of media pluralism, the protection of minors and consumers and increasing awareness and media literacy of the public, now and in the future.”

These efforts to bring digital and media literacy as a key element of the development of information society in Europe concluded in the enactment

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of the European Audiovisual Services Directive\(^9\), which in should have been incorporated –on December 2009– into legislation in all Member States of the European Union, introducing for the first time in regulation of the media system, the need to promote media literacy.

The directive stresses creative and critical capacities of citizens before the media: “Those skilled in the use of the media may choose knowingly, understanding the nature of content and services, take the whole range of opportunities offered by new communication technologies and better protect their families and themselves against harmful or offensive contents.”

Among other, it highlights:

a) The change of focus on media literacy from the protection to the promotion with the aim of empowering and involve citizens;

b) The change of perspective from the mass media to new technologies and digital media;

c) The increasing awareness of citizens, as the media industry; and

d) The increased presence of media literacy into the teaching curriculum, and participation and promotion of media literacy authority regulators.

A conceptual map

The complexity of the subject makes it difficult to quantify the level of media literacy, which is a complicated phenomenon observable but mainly not directly quantifiable. It is for this reason that a conceptual map was created to enable the further elaboration of media literacy criteria and the key environmental factors, which hamper or facilitate the development of media literacy in the EU countries.

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9. This directive replaces the old European Directive on Television without Frontiers (DTVSF 89/552/EC). The Directive entered into force in December 2007, but member states have until the end of 2009 to incorporate into its legislation.
Table 1. Individual Competences and Environmental Factors

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Criteria</th>
<th>Objectives</th>
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<tbody>
<tr>
<td>Individual Competences</td>
<td>– Use skills (technical)</td>
<td>To increase awareness about how media messages influence perceptions, popular culture and personal choices;</td>
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<td></td>
<td>– Critical Understand, competences;</td>
<td>– To provide the skill for critical analysis;</td>
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<td></td>
<td>– Communicative Abilities;</td>
<td>– To provide the creative skill to solve problems;</td>
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<td>– To develop the capacity of production;</td>
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<td>– To consolidate Communicative rights;</td>
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<td></td>
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<td>– To develop intercultural dialogue;</td>
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<td>– To consolidate democracy;</td>
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<td></td>
<td></td>
<td>– To develop active and participatory citizenship.</td>
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<td></td>
<td></td>
<td>(Amongst others)</td>
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<tr>
<td>Environmental Factors</td>
<td>Media Availability</td>
<td>Supply of media</td>
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<td></td>
<td>Media Literacy Context</td>
<td>Media Education as a process to develop media literacy capacities</td>
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<td>Media literacy policies and regulatory authorities</td>
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<td>Media industry role and activity in relation to media literacy</td>
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<td>Civil society role and activity in relation to media literacy</td>
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Two Dimensions

As we can see in Table 1, the Study draw / describes two elements that contribute to media literacy: individual’s abilities and contextual or environmental factors. It breaks them down further into components, which are measured by criteria: technical, cognitive, participative and creative. In the same way, the key environmental factors which help or hinder the media literacy developed. There are a further set of variables which relate to the level of development of these skills and this in turn is applied, via a statistically validated instrument, to assess a Member State’s media literacy levels.

In other hand, the environmental factors include the economic wealth of a country, the affluence of its citizens, the legislative and regulatory structures that support the digital media and the advancement of them and, crucially, the governmental support afforded to them, in terms of educational policy, subsidy etc. Media literacy does not exist in a bubble, but is affected by a variety of dynamic factors and facilitates interdependent skills and competences to allow individuals a complete participation in the new digital world.

Thus, it is assumed that environmental influences (education, institutional, industry, etc.) affect the way individual skills develop: educational opportunities and favourable environmental factors produce better educated and developed individuals. This is an assertion based on the experience (both scientific
and empirical) that has been accumulated in this area over decades. However, these factors do not guarantee a specific result. Research cannot encompass all the variables that may potentially affect a particular process.

The EC requires assessment of the condition of the individuals in each country and also what institutions can do to improve individual conditions. This way, the institutions included in Environmental Factors are mediators between the policies of the Commission and national governments, and the improvement of individual skills.

That is the reason to the Study identified two dimensions within media literacy: one flowing from an individual’s ability to utilize the media informed (Individual Competences-IC). The other, the set of contextual factors than impact the broad span of media literacy: availability, media policy, education and the role and responsibility of stakeholders in the media community (Environmental Factors -EF). These dimensions were broken down into criteria:

a) Individual competences. Within the individual skills relating to media literacy, we have distinguished the following criteria: use, critical understanding and communicative abilities, any individual skill is developed along the three dimensions of doing, which imply the capacity to operate, (operative ability; practical use), knowing critically (or cognitive competence), and the objective that the skill set should meet; in this case, communication, social relationships, participation (in the public sphere) and creation.

b) Environmental factors: media policy, media education, media industry and the actions of civil society. This is all on the foundation of availability.

All together were taken into account to generate an overview for the referencing of development in media literacy without risking the dilution of particular indicators. Most of the identified indicators were based in part on pre-existing data. This data was uncomplicated and allowed for diverse applications, permitting generative comparisons and longitudinal analysis.

Technical skills

Technical skills are the instrumental and operative abilities required to access and effectively use media communication tools. They specifically refer to a set of devices and tools available in a certain context or environment. In relation to these skills, we distinguish between: access (the individual can gain access to the media. Access affects the relationship between the context and the individual) and use (the individual use the media to act).

Therefore, technical skills are a prerequisite to the use of media. These technical skills may be further developed by the individual to adapt to specific users and their needs. By their nature, technical abilities include aspects related to certain decoding capacities (especially of interfaces) and the ability to use specific functionalities that media tools may possess. From this perspective,
technical skills could overlap with cognitive ability. However, as we will explain below, in this study we consider cognitive level more sophisticated competences as belonging to a more advanced level of technical skills.

**Critical understanding skills**

Whilst use dimension is the intersection between availability and operational skills, critical understanding includes all the cognitive processes that influence the user's practices (effectiveness of actions, degree of freedom or restriction, regulation and norms, etc.). Use requires knowledge; cognitive understanding requires meta-knowledge (knowledge about knowledge). This knowledge allows the user to evaluate aspects of the media, by way of comparing different types and sources of information, arriving to conclusions about its veracity and appropriateness, and making informed choices.

**Communicative skills**

Finally, the communicative abilities are the manifestation of the success or failure of the previous levels. These are skills that manifest themselves in communication and participation with social groups via the media, and content creation. This is the highest degree of media literacy.

**Trends in digital literacy in Europe**

So far we have seen how have been developed policies to promote media literacy in Europe. Now we describe the dominant trends in each period to recognize trends at present. We identify four strategies and models for action in promoting media literacy in the last decade.

1) Model focuses on achieving total connectivity and access;
2) Model focused on promoting the development basic skills for using computers and Internet;
3) Model that promotes developing the basic skill of specific groups;
4) Model that seeks to increase the quality of use of digital technologies.
Model focuses on achieving total connectivity and access

In the context of an insufficient extension of ICT, this model focuses primarily on the provision of infrastructure devices that allow both access to technology and the acquisition of the minimum standards.

Initiatives focus on provide and ensure infrastructure and establishment of spaces or access to ICTs Priority is given, therefore, expenditure on providing computers and technological devices to schools and citizens, and make them available to users free or at low cost and the success is determined by the amount of people using ICTs.

There are two areas:

a) Policies designed to facilitate individual citizens and households access to ICTs, which entailed investments in infrastructure, incentives for operating companies, actions to lower the purchase price and access.

b) The support and promotion of the provision of educational and public access to ICTs.

Strength of model

The increased connectivity as a result of strong public investment to equip schools evaluated in terms of ratio of per pupil and teacher availability of computers; and in homes as a result of aids for purchasing computers, incentives to cut prices, public campaigns for the dissemination of ICTs, etc.
Weakness of model

Despite the efforts, some exclusion digital zones don’t have been eradicated because of the lack of interest or needs. Financial resources and skills to use technology and because does not ensure the culture change in institutions and endemic problems of some administration, educational government and health systems persist. It can be said that ICTs helped to provide new systems on the control of processes, but few real transformation practices and improving the overall efficiency of the institutions.

Some results of this model are reflected both in the actions undertaken by European countries in the framework of eEurope\textsuperscript{10} and the results of its benchmarking exercise carried out to track the progress of the Information Society in Member States, and that, in terms of internet use\textsuperscript{11}, concludes the spread of digital technology is advancing rapidly and the number of users is multiplying. However, not exploited the full potential offered by these technologies.

Model focused on promoting the development basic skills for using computers and Internet

The model is focused on promoting training in the basic use or the initial level use. Was aimed at all audiences, but have recently been establishing differences between types of consumers or users. Its priority is given to public Internet access in areas “depressed and marginalized and have trainers or coaches to guide users during their approach to the use of ICT in a” reliable space”.

Strength of model

Bringing exclude people to ICT, the creation of local public centres with training that enables access. Finally, include digital competences as part of the compulsory education with technological equipment in schools.

Weakness of model

The weaknesses are in relation to the users and in its purposes. That is, in one hand, it is motivating just for some persons; a gap still exists between users. In promoting basic use of technology, users do not recognize the opportunities for taking advantage in their everyday lives because the increased of services from e-government, e-business, which are not understood.

In the other hand, the model does not distinguish specific groups. The curriculum of media literacy programs is too general and abstract; the courses and the digital literacy centres are designed for mainstream audiences, so there is a gap between people who want to participate and those who does not, causing disadvantages in terms of opportunities to extract benefits. In schools if media literacy exists, is as an independent subject or is assumed as digital literacy, so it depends of the teacher’s possibilities (and decision) to promote it.

In addition, in this model, the access does not cover all the regions, so, the internet access centres do not guarantee the possibility of use to those who live far from them or, in many cases, don’t guarantee the access to people with disabilities. As result, there are remaining people excluded from the benefits of the network.

_Model that promotes developing the basic skill of specific targets_

Model focus on users, responding to their specific needs, especially those factors that lead to exclusion (poor employment status, gender barriers, income barriers, etc.). In pursuit of total connectivity, there are elements that lead to strategic change: instead of target a general public, distinction is drawn by user profiles. Digital literacy becomes to media literacy, focusing increasingly on the developed of the user’s abilities and the need to develop critical thinking and active participation of individuals in order to address the growing ICT offers.

_Strength of model_

Digital and media education are directed toward specific and defined audiences, giving more importance to users production. Develop curricula that meet specific needs of particular groups and increase didactic resources that allow students to develop communication skills. Media literacy has presence in the curriculum of compulsory education. Digital literacy is present in almost all educational curricular models in Europe in order to face the growing phenomenon of converging media and the increase in communications.

Media literacy is being established as a larger educational goal to achieve. Moreover, there is a new conception of literacy, focus not only in the protection issue but in promoting media literacy skills of individuals and shared responsibilities among stakeholders. The goal is to strengthen the autonomy and empower the public participation. The whole process is based on social sectors and the involvement of the media industry. European institutions, regulatory authorities and civil society groups (citizens, consumers and parents) are more involved in media literacy campaigns and the media industry are more interested in the development of media literacy (and media education), especially the newspapers in school, film festivals.
Weakness of model

The lack of networks and dissipation of governmental effort and poor coordination among stakeholders; despite promoting actions, the different sectors act independently without synergies or continuity. Impact of projects is not as expected. That lack of shared vision to enhance media literacy also affects a new curriculum conceptualization.

Model aimed to increase the quality of use of digital technologies.

Model focused on the quality of use of ICT and media use to satisfy the needs of the users, which mean an improvement over those models that prioritized the quantity and the provision of technological devices. This implies an enhanced frame for skills and more complex strategies that involve more critical reading of media and strong interactivity when using ICT. In this sense, an important element of the model is to develop a critical and awareness in faced the contents and functions of media and technologies with a view to establishing a conscious and responsible attitude toward the use of new technological possibilities.

Strength of model

Model focus in strengthens the users’ confidence of as a result of awareness campaigns that promote the safe use of technology and action initiatives and laws for the protection of minors from the media. On that basis, the implementation of the Media literacy as a part of the curriculum as a subject and as a matter of continuing education throughout life its being considered and starts to be a part of teacher training programs.

This model emphasize on developing the skills related to new media and new platforms where conventional media converge, and the need to promote creativity in non professional audiovisuals and online productions. It promotes citizen participation (e-democracy) and production, creation and dissemination of didactic materials and content, taking into account not only individual conditions, but the environment and educational one.

The model encourages teamwork and creation of networks for participation, i.e. promoting a responsible participation in forums, social networks, and digital community spaces to participate in the social life of the community.

Finally, in order to assure the success of the model or reinforce it, the progress of the digital and media literacy is evaluated constantly, applying initiatives for improvement, promoting the assessment levels of media literacy, especially in regard to access and confidence in their use. Tests are conducted to evaluate not only access and consume of ICT and media, but the quality of use of media and communication technologies.
Weakness of model

Historically marginalized groups (the elderly, unemployed, cultural minorities, etc.) continue to be, without access to benefits of technology. This model can be effort establishing higher levels of creation and guaranteeing dissemination as result of synergy between different sectors: government, industry, schools and not allow further progress in the creation of content by users.

Conclusions

So far we have considered the different stages, models and strategies developed by the European Commission in promoting digital and media literacy. From this experience we can draw some conclusions as the fact that all models now coexist and to a large extent, they reflect the economic and social environment in which they are implanted.

It can be seen in almost ten years the digital literacy model (which enhanced the availability and access to ICT) has gain complexity to face the new media context, and nowadays we can recognize some models aimed to promoted creation and critical active and responsible citizens in the public sphere using the search new digital environment.

The change of focus - which is given in the Seville European Council in June 2002 - shows a deep change: the focus is not longer the TIC and media (and the media industry) but the users. In addition, initiatives are not only in the sense of protection but the promotion of an active and critical attitude of users before the media. Now is assumed that the technological equipment is not sufficient to guarantee de information right for everyone. Today is a accepted fact that government, industry, civic society, educational systems must invest in a models of media literacy that provides of training throughout life (or training).

This way, assuming not only the necessity of developed the technical skill, but critical skill of individuals has been a key factor in the development of policies for promoting media literacy.

Summarizing, all means that media literacy efforts must be towards a model that eventually will count with an inclusive use of the technology and as an collective effort between different sectors, governments, industry, and institutions and allow audiences and users participation, for example by their own creation of content by users.

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