



A new model for Promoting Digital Literacy

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Introduction

The subject *Digital Literacy* always lacks undefined areas, uncertainties and disorientations.

The **undefined areas** refer to the concept of Digital Literacy. This probably has to do with the diversity of connotations that this expression has in different languages. However, what is essential to know is that there is no clear denotation of the competences or abilities that is designated to it, nor the limitations or relationships, just like with other similar terms like Media Education, Media Literacy, or others.

The **uncertainties** come from the fact that an organized system of observation, follow up and evaluation of digital literacy in society does not exist. The information that we make available to different countries is not sufficiently standardized, and every indicator that we use is false.

Finally, the **disorientation** is referred to action strategy. What can one do when, besides the undefined areas and uncertainties, we do not make set references available? The most probable is that, in this situation, our action can only be exploratory and dubitative.

Nevertheless, in the most recent times, while moving to the digital world, some uncertainties have disappeared and one can perceive a certain consensus regarding Digital Literacy. If this process advances and grows, it will permit us to establish an appropriate framework for actions.

In this context, our mission, would be to signal these consensus areas, strengthen them, and work to obtain results that can become a social-cultural instrument.

Consensus Zones

What consensus areas are being produced between experts and political directors? We will review them below.

Regarding the **definition**, it seems that a consensus is in the following issues:

- a) Digital Literacy is known as a mixture of knowledge, abilities, and practices related to digital systems, and actions that come from them.
- b) Digital Literacy is not considered, as a principle, knowledge that is merely technical nor operative, rather something that includes cognitive, communicative, and cultural operations. It integrates linguistic and semiotic competences, as well as communicative and sociocultural abilities.
- c) Today, Digital Literacy summarizes and integrates the knowledge of *Media Literacy*. In any case, they are presented as two inseparable areas, mainly in regarding the critical content that has traditionally been incorporated in Media Literacy.

It sheds the idea that acquisition of Digital Literacy is an essential part of this process for consolidating new cultural guidelines.

The uncertainties related to the phenomenon of digital literacy seem to be forming some **certainties**:

- a) We know it is a change which is globally produced and accelerates in countries with broad educational cultural development – and, at the same time, increases this development
- b) This change offers excellent opportunities, however encloses the risk that the inequalities between countries are becoming deeper – including the social stratas within the same country.
- c) Digital Literacy acquisition is more accelerated between young people, while it is slower and more difficult between adults with a scarce amount of economical resources (especially amongst women).

When referring to actions, some **orientations** are being found. They state that:

- a) Education systems must adopt Digital Literacy as one of their basic objectives.
- b) The acquisition of these abilities have to been made through changes in traditional learning methods and the organization of school work. If this is not produced, the traditional routines can become a great barrier for digital literacy.
- c) Students must acquire digital literacy, not as a result in itself, but rather a capacity linked to the world and its interests, actually by giving itself meaning.
- d) The professors have to understand digital literacy not as content, but rather as a new opportunity for learning and cooperative work, as well as a new system for organizing educational activities.
- e) What is referred to as citizens, in general, institutions and public organizations, they should try to promote literacy as an offer for new opportunities for personal and professional progress. For this reason, initiatives have to be started up and go directly to citizens in their habitual lifestyles: work, home, family, leisure, cities, etc.

A new focus

In respect to the consensus that is being created about Digital Literacy there are strong ideas that are being found and constituting the policy prologue.

The first one is the **convergence of the original concept of Media Literacy and the most current one of Digital Literacy.**

The reasons for this convergence are clear. Today it is true that the media, new and traditional, are being transformed to the digitalisation phenomenon. This has happened with the radio, television, cinema, press, etc. On the other hand, the Internet is becoming the media of all medias while more traditional content are beginning to go around the web. The convergence between the media and becoming digital is already a fact. So, Digital Literacy is taking on a large chunk of the content and the philosophy which inspired Mediatic Literacy. Nevertheless, emphasis on becoming digital brings us closer to issues that are left behind in Media Education: interactivity, individual creativity, globalization, cultural diversity, constructing cooperation networks, etc. – issues that are located in the center of the digital paradigm.

The second is the need for a **cultural focus related to Digital Literacy**. Digital literacy is one of the key processes of enculturation that the Information Society is generating. In this aspect, is it important to consider it as an opportunity to strengthen a new meaning of citizenship based on responsibility and participation, and a new meaning of technology centered on humanistic and cultural spirit.

The third is related to the idea that Digital Literacy can only develop itself in a framework of complete integration with profound interests for individuals, institutions, and the communities. It is true that digital education is an opportunity for change and transformation, however it is even truer that if it does not connect with energies, aspirations and tendencies of the individuals and groups, it runs the risk of becoming a pure cosmetic proposal. On the other hand, if it is in sync with the energy that charges people and collective groups by optimising their resources and finding a better adaptation model for their environment, then it will gain its full meaning.

In the fourth place, Digital Literacy should lead to a democratic citizenship and, for this reason, **it requires promotional policies that reinforce equity and not discrimination**.

Having these ideas in mind it is possible to develop a progress scale for digital literacy that would allow basic concepts and key elements to be established for a new model for promoting digital literacy. This scale is the outcome of a study and analysis of the principal projects regarding the information society that the European Commission has financed and relates to digital literacy or how it could contribute to it.

In the following pages we propose the basic elements of this scale and the type of actions that they correspond to.

A model for a digital culture development

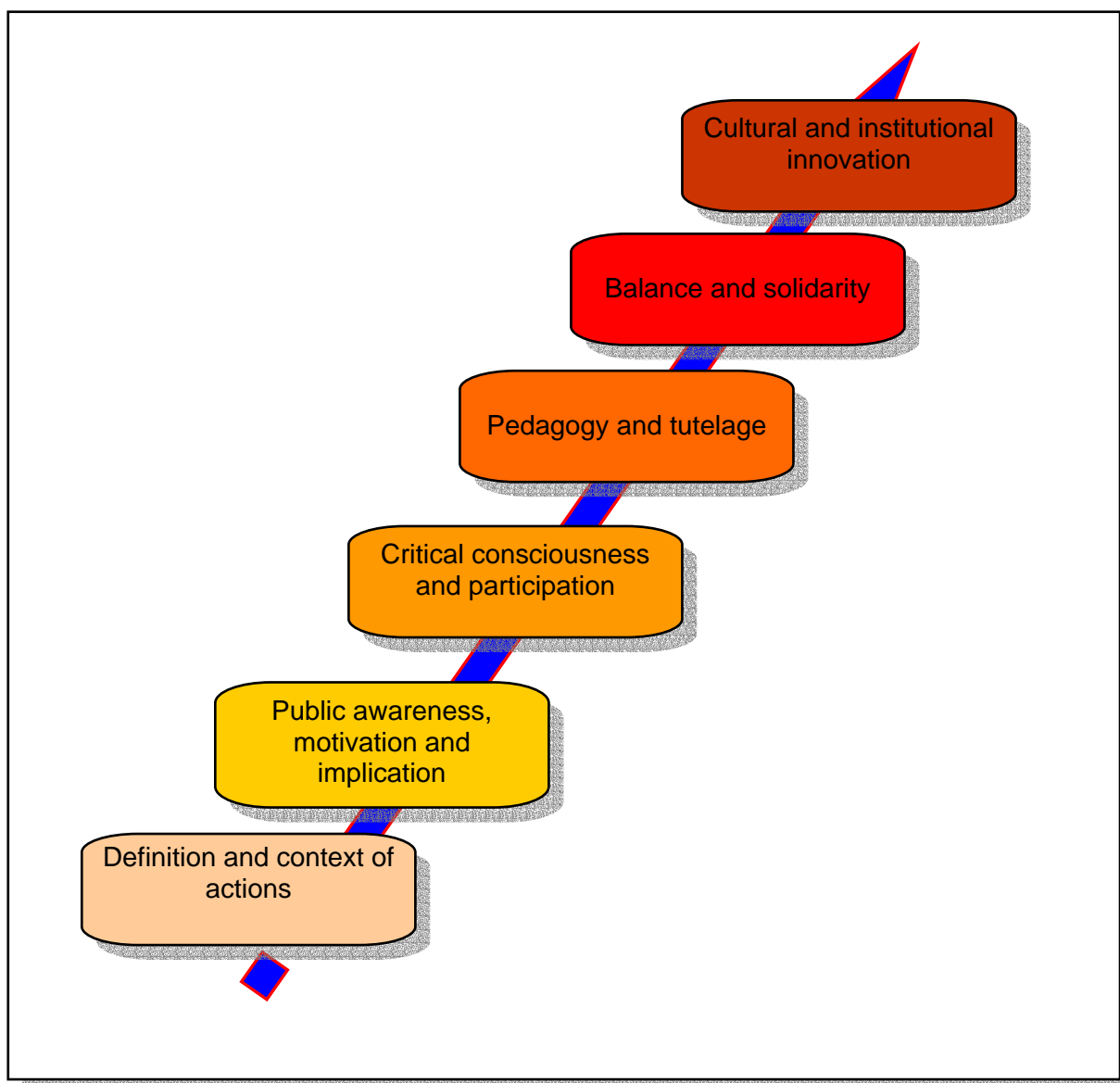
In first place some ideas about the a understanding of Digital Literacy that is in the base of our scale.

1. That considers digital literacy to be a complex and extensive process that develops through diverse procedures, in different areas and involving several actors.
2. That considers these procedures as part of an integrated system, where few courses of action can be taken without taking into account the general context.
3. That digital literacy must be the subject of promotions, oriented on improving the quality of the related practices and on insuring the implication of different sectors of society.

To that respect, in the first place we propose a model capable of describing different dimensions of a digital literacy promotion policy. Subsequently, we propose specific actions in each one of these fields.

The following elements are fundamental in overcoming the obstacles that prevent the full development of a digital culture.

Digital culture progress scale



At the base of the scale, concrete policies are introduced that require definition and being placed into context. These actions must respond to specific needs and objectives. This basis is a starting point, representing the expression of aspirations and purposes, that correspond to conceptual and projection stages.

On the second step, public implication is reflected through strategies that increase awareness and trigger positive motivation.

On the third step, policies are introduced related to public participation and the acquisition of a critical consciousness with regard to the pursued objectives, as well as the adequate criteria for confronting these topics.

On the fourth step, once a reasonable degree of participation has been attained, actions must be tutored and accompanied by pedagogical strategies to insure that the expertise of the actors is up-to-date and in agreement with the pursued objectives.

On the fifth step, the key dimension of digital promotion understood as the fight against a possible digital divide appears. Any action that is carried out towards the digital cultural development must be made taking into account precise criteria of social justice and solidarity, implying social cohesion.

Finally, any particular action consolidated over these different stages must conclude in an institutional and general acceptance of the organizational and action norms that will suppose a genuine social innovation.

The model's different stages indicate that the digital culture promotional policy is progressive and should fulfil certain conditions before an authentic socio-institutional step forward can be made.

Defining different dimensions

Definition and context

Objective: To guarantee that projects as well as policies referring to the promotion of digital literacy can count on a precise, systematic and contextual comprehension of the digital culture's scope and its social effects. By *definition* it is understood that, projects are to be defined adequately and should correspond to a satisfactory concept of the digital culture. On the other hand, the term *context* refers to the relationship between projects and their social and geographical environments.

In this sense and regarding definitions, it will be necessary to determine the concept of digital literacy. To this end, one can see what has been discussed in the section in the *Understanding digital literacy*¹ report. It would be desirable to obtain a synthesis between the principles that inspire digital literacy, taken as learning linked to technology, with the principles that constitute the weight in media and communication education. This way, the training requirements related to technological development would be compatible with democratic demands for maintaining a critical and independent conscience in people and a free and plural public sphere.

¹ See volume II

In this context and on the subject of digital culture, what must be established is which social and geographical areas are to be focused on through priority and effort and how it should be implemented.

Public awareness and motivation

Objective: To introduce to the general public issues related to the digital culture through incentive actions which will provide a favourable environment. In the same sense, digital literacy projects and objectives should obtain the recognition and relevance they require.

By “recognition” we understand that public opinion and the social debate should give the digital cultural issues significant attention. “Motivation” is the pro-active attitude in citizens towards ICT and its use.

The key issues related to digital culture should become the centre of attention for a majority of citizens, reaching therefore all sectors and social groups without exception. To do so, it is necessary that mass media, public opinion, and social debate – basically the public sphere – concern themselves with the values and the meaning of integrating ICT into our social life. By doing so, a favourable environment for its development should be established, which at the same time will be demanding with its social responsibilities.

For the digital culture to develop its maximum potential as well as its social benefits, it is necessary for citizens to feel motivated to use ICT, receiving specific gratifications for it. This is why motivating contexts and incentive systems should be put into place directed towards individuals or groups, not only for the development of infrastructures but also for the implementation of new services and contents.

Critical consciousness and participation

Objective: To generate an independent and critical consciousness that has social responsibility as a priority in ICT development, by creating participation and co-responsibility platforms between the citizenship and the ICT industrial production system. Creating critical consciousness is a necessary component in every activity in promoting digital literacy.

Passive response to changes and innovations implied in ICT or their resigned acceptance, hinder the energy shift that innovation and social change demand. Only an advanced thinking and collective consciousness in citizens will provide an adequate context for social progress. Only that critical conscience will engender the required creativeness to go forward.

To generate an active and confident climate for European ICT development, a relationship management should be put into place relating citizens with the industrial and institutional systems that promote technological innovation. To obtain this, European consumer associations and citizen platforms should be developed, that will serve to monitor the information society's deployment.

Pedagogy and tutelage

Objective: To promote ICT related pedagogic and tutorial activities, bringing about a secure and confident atmosphere.

The complex use of ICT and the difficulties implied in new ways of learning, tend to create distrust and insecurity. This can be a big obstacle in an authentic exploitation of the digital culture.

In this sense, it is important to provide support and tutoring systems in all ICT stimulating activities, especially for specific groups. This being important for all citizens, is especially important when directed to underprivileged groups or groups with a low educational degree.

Balance and solidarity

Objective: To undertake actions destined to reduce differences among the various sectors of society by creating an environment of solidarity and cooperation among diverse sectors that participate in the ICT deployment.

Public and social actions should contribute to provide a fair access and enjoyment of ICT to all social sectors, paying special attention to training and to having the required skills for their use and development.

This obliges the more advanced sectors to give support and reinforce those which are behind, working with them to satisfy their needs and demands.

Institutional innovation

Objective: To involve institutions so that they support ICT development and, at the same time, change and renew themselves by taking advantage of the technological changes.

Governments, education systems, businesses and institutions in general must renovate themselves in depth to take advantage of ICT development and, at the same time, should contribute to it from their particular position to benefit its growth in all social areas.

General actions

In view of these objectives, some general recommendations can be made that are applicable to the entire group of actions regarding digital literacy promotion in the European Union. These general guidelines also happen to be the most urgent ones as a response to the proposed model. Some of these actions are already being carried out, however everything indicates that they should be strengthened and intensified to obtain a more notorious and vigorous effect.

1. Promotion of specific, defined projects within a particular context according to a specific methodology that corresponds to the nature of the fight against the digital gap and in favour of inclusion policies. Some general criteria should be established for putting all subsidized projects into practice.

- ❑ The definition of a project, a political action, has to be related inevitably to well-defined audiences, characterized by factors such as income levels, their difficulties or special needs and their specific position in relation to ICT benefits.
- ❑ The requirement that the project be related to specific geographic contexts, where central elements for promoting digital literacy are taken into account in their classification.

2. Promotion of joint action frameworks based on proven models and references as well as on other shared elements. So additional to the required diversity, common reference centres, models and obligatory meetings should be encouraged to promote exchange and to share in the progress.

With this in mind, common frameworks, indicators accepted by consensus and common cultural concepts should be sponsored.

- ❑ All of this implies the existence of databases and other central resources available to the community of actors related to *eLearning* and digital literacy.

3. Procuring a larger incorporation of national policies and projects on the Net. National policies are indispensable for digital literacy promotion, because they are familiar to the population and are more efficient. Nevertheless, achieving a European dimension in this action through national policies is necessary for increasing effectiveness and exchanging experiences.

- ❑ Projects on the Net should ensure the participation of the most important national actors in the area of the digital literacy promotion.
- ❑ These projects should emphasize the creation of experiences and other shared resources; and, they should also take advantage of all the capital consequence of national government and regional actions.

4. Creating a connection between actions of digital inclusion and promotion of equal employment opportunity and social justice. This is the only way to acquire the motivation that people and different groups need to feel involved in the new learning methods that the digital culture requires.

- ❑ In this sense, it is suggested to stimulate the presence of actors related to job hunting and the business world.
- ❑ In addition, the digital culture learning methods should be related to social progress.

5. Mass media implication. Taking into account that mass media reaches most of the population and that the digital cultural promotion should be massive if it is to be improved, it would be necessary to activate the media's involvement in encouraging digital literacy.

- ❑ It is convenient to link media promotional activities with market expansion and the need for consolidating technological progress. In this sense, we believe it would be necessary to develop parallel literacy strategies when confronted with technological phenomena such as: new generation phone systems; interactive digital television and the convergence between the Internet and audiovisual media.
- ❑ All this should be interrelated with the natural evolution of literacy requirements - towards more sophisticated multimedia systems – on the subject of eLearning.

Action plan and strategies

In the following, we will highlight the strategies and the action plan that correspond to the indicated model's dimensions.

Definition and context

a. Beyond technical simplification. Adopting a cultural focus

- Overcoming the technical-instrumental reductionism of digital literacy, introducing learning abilities and an independent critical perception as well as a sense of responsible citizenship.
- Promoting the concept of digital culture in the frame of public and civic sphere.
- Considering the concept of the digital culture as a chance for a **new humanism** focused on people.

Proposal:

Promote the creation of a **European Framework** for digital literacy and digital cultural development as part of a continuous learning process.

Proposal:

Determine, through an operative concept of digital literacy, a **common methodology for project development**, which meets digital literacy needs by specifying: public specification; social, demographic and cultural characterization of such public; establishing a level of common required facts and their diffusion; multiplier effects, etc.

Proposal:

Create a **European digital culture data and tool bank**.

Proposal:

Stimulate, by introducing, a transversal curricular area in **Technology and Humanities** studies in higher education, both in technological as well as humanistic academic plans.

b. Improving indicators related to the information society.

- ❑ Complement the current indicators - focused almost exclusively on quantitative aspects of new technological product penetration - with qualitative approaches that take into account the point of view of actors and participants, drawing attention to social habitual uses.
- ❑ Pay more attention to the role of the contexts in building models for using ICT and their impact on society.

Proposal:

Design **specific indicators** for digital culture development adapted to countries, regions, educational centres, social structures and labor frameworks.

Proposal:

Boost the creation of **observatory networks** that share such indicators and develop a quantitative and qualitative methodology.

Public awareness, motivation and implication

a. Reaching the large public

- Paying attention to the general public beyond the sectors directly related to education and training or job training.
- Creating a favourable environment for ICT development, stimulating public discourse that make them more understandable and accessible.
- Stimulating pedagogical and instructional dialogues to accompany the digital cultural learning, especially among those who are outside the educational systems.
- Take advantage of the communication abilities that broadcast radio provides, especially those that provide a public service.
- Encourage citizens to be aware of the need for them to actively participate in ICT usage.

Proposal:

Promote a **European Digital Curriculum**, a large audiovisual resource bank for eLearning and digital literacy promotion, where public and private institutions and companies participate.

Proposal:

Create and launch the **Media/ICT** program: educational campaigns for ICT development products resulting from cooperation between educational systems and the mass media.

Proposal:

Foster **creating Internet access points (PAPI)** that relate training, job hunting, financial initiatives, community life and integration in local cultures.

Critical consciousness and participation

a. Promoting critical consciousness towards the digital culture

- Establish criteria on quality and standards for analyzing new digital services and their social validation.
- Assist to encourage the awareness of citizen rights taking into account the new social cultural contexts.
- Stimulate learning to be critical when receiving messages common to the digital culture.

Proposal:

Promote good conduct codes based on **self-control and shared responsibilities**.

Develop educational strategies aimed at encouraging **media education and critical reception**.

Proposal:

Motivate information on **citizen and consumer rights and obligations** regarding new media as well as the active participation in their community.

b. Sponsoring structures for participation

- Encouraging consumer associations related to ICT.
- Promoting citizen debates on ICT with the presence of public opinion and participation platforms.
- Developing strategies that may help and foment the contact between industry and consumers.

Proposal:

Activate the creation of a **European network of consumer associations related to ICT** and the media.

Proposal:

Develop the structure of **forums where citizen and ICT industry representatives can have encounters.**

Create and diffuse **best practice guides** related to ICT development.

Pedagogy and tutelage

a. Monitoring the learning process and the social extension of digital literacy

- Establish the curriculum and teaching models.
- Creating a favourable environment for learning the competences related to ICT.

Proposal:

Create a **digital literacy curricular development framework** appropriate for every context and learning need.

Proposal:

Create adult **intensive ICT programs** with follow up strategies.

Balance and solidarity

a. Specific actions for specific publics

Proposal:

Design strategies for **specific publics**, especially for:

- Early drop outs.
- Relegated women.
- Elderly citizens.
- Rural and isolated area population.
- Poverty stricken and relegated groups.
- Middle aged adults looking for employment.
- Foreigners and immigrants.
- Handicapped.
- Special situation groups: hospitalized, in jail, permanently unemployed, etc.

Proposals:

- Establish methods that allocate **cooperation between more advanced and slower groups to work together** in projects related to the digital culture.
- Promote making **simple and accessible didactic material**.
- Reinforce the production of **interfaces and programs adapted to specific publics**.

Proposals:

- Develop **contents and services for specific publics**.
- Create **consultancy and auxiliary services**.
- Encourage creating **thematic networks on ICT and special needs**.
- Invest in **special interface development** projects for specific publics.

Institutional innovation

a. Publication and access to public patrimony

Proposal:

- Make important patrimonial contents available to the public**, that belongs to the states: video libraries, libraries, museums, archives, audiovisual archives, etc.
- Help citizens by implementing **access systems and their use**.

b. Educational centres

Proposals:

- Promote a new task for **academic centers acting as catalysts and stimulators** of their environment by educating through the use of ICT.
- Study methods to develop **digital training among all sectors of the academic community**, especially among mothers and fathers.

Proposals:

- ❑ Develop **platforms for cooperation through ICT** among academic centres and the institutions that surround them.
- ❑ Consolidate **specific curriculums for ICT training in school programs** by designing transversal and vertical strategies, always insuring integral training: taking into account technical, cognitive, and socio-cultural aspects.

Proposals:

- ❑ Contribute and support the conception of contents and services that provide ICT training and monitoring.
- ❑ Build networks of centres for innovative ICT project development.
- ❑ Stimulating pedagogical projects that share ICT contents and resources.

c. Civic Centres and ICT

Proposals:

- ❑ Create and promote cultural and civic centers where ICT make up an essential part.
- ❑ Promote digitizing archives and library services as well as ICT diffusion and training.
- ❑ Being supportive with these centers' role in new ways for training and employing people who have been excluded from the traditional education system.
- ❑ Develop networks between these centers and school systems.

