1. Digital Literacy - Background

a. Can you identify the main concepts around Digital Literacy (DL)?


b. Historical perspective

In the end of the 1990s, the discourse was mostly focused on access to the internet, and terms used were such as ‘info-inclusion’/‘info-exclusion’ and ‘info-alphabetisation’ (Missão para a Sociedade da Informação [Mission for Information Society], 1997). During the first decade of the 2000s, it changed to a focus on the spread of broadband and ICT among active population and students, without an emphasis to the dimension of competences or literacy. The agenda was that of integrating ICT in more and more sectors of public life, from education to health and governance (Plano Tecnológico da Educação [Technological Plan for Education] - PTE, 2007).
In 2010 things start to change towards a greater focus on uses and competences. The terms 'competences' and 'skills' are more present in public documents. This date is associated with the Recommendation by CNE (Conselho Nacional de Educação [National Council for Education], 2011), the launch of the Informal Group for Media Education and the biannual conferences (2011), after the first of whose the Braga Declaration was issued (Declaração de Braga [Braga Declaration], 2011). Digital literacy is integrated in media education but it is one of the main justifications for its urgency.

In the beginning of the 2010s, the number of projects and initiatives associated with media literacy increased and in 2014-16 the dimension of the digital needs and potentials increased. This change over time led to the coexistence of older projects/initiatives/contests that were more media-literacy based, with the ones that have a relevant digital interest (blogs, video, audio, school journalism, reading, among others) and also digital literacy focused projects (e.g., Code). School journalism was one of the first specific field in the scope of media literacy (Público na Escola [Público at School]), and in the last years it gained another relevance by using digital proposals (Plataforma dos Jornais Escolares [School Newspapers Platform] and Media Lab).

This happens not only with national initiatives but also with connections to European associations or celebratory days (such as Safer Internet Day - SID), that gained worldwide relevance over the last years, mostly promoted by Internet Segura [Safe internet]; Radio Day – February 13th, promoted by UNESCO - and Operation Seven Days with the Media which takes place in Portugal during the week of World Press Freedom Day, celebrated internationally on the May 3rd).

Digital sphere has made a strong incentive for the huge increase of initiatives in the last years. We must note that in Portugal there are a lot of scattered initiatives, some of these at a regional level for local communities (elderly, adults and also children and young people). Besides this, at a national level there are initiatives particularly targeted to students, parents and teachers. Media education in Portugal has a strong tradition in school's activities (particularly school journalism and school newspapers) that persists, particularly since the Carnation Revolution till these days.

c. Concepts mapping: cross dimensions in regards to DL

1 – Digital and Offline - Forms of collaboration in the classroom are not specifically only digital (e.g. Equipa de Recursos e Tecnologias Educativas [Team for Resources and Educative Technologies] ERTE): the digital literacy improvements can be connected with offline activities; sometimes, they even make more sense to improve in the next level the digital literacy competences.

2 – Digital pedagogy (e.g. ERTE) - A pedagogy that is more focused on the digital, it is supposed to be differentiated from the more traditional pedagogies.

3 – Digital citizenship - Use and production of digital contents and digital citizenship (e.g. ERTE). These are dimensions that often come across and that are related with initiatives where the participants/mostly students are invited to reflect on social issues or the world they live in. It is to make an activity that involves technologies but some other type of thinking. Civic literacy, media literacy, citizenship in relation with digital
techniques and uses (e.g. Plataforma dos Jornais Escolares [School Newspapers Platform]); these concepts are especially relevant in school journalism.

4 - Digital as life need - Direct relation between understanding digital technologies and development of different literacies, creativity, reading and connection with surrounding communities and collaborative work (e.g. ERTE; Rede de Bibliotecas Escolares [School Library Network] [RBE]; Plano Nacional de Leitura [National Plan for Reading]).

5 – Digital in relationship with school subjects – Such as Science, math, technology, ICT and engineering (e.g. ERTE and Literacia3D [3DLiteracy]).

6 – ICT - is still one of the most mentioned transversal dimensions that it is related with media literacy and digital literacy (e.g. Web We Want). In Portugal this gained relevance with Plano Tecnológico [Technological Plan] (2007). (See b. Historical perspective)

7 – Digital literacy and other literacies - Media literacy, informational, transliteracy (e.g. RBE; Referencial Educação para os Media [Media Education Referential])

8 – Digital and safety – This is one of the most relevant associations and there are some very important initiatives that are specifically target to this need (e.g. ERTE; RBE; Internet Segura [Safer Internet]; Web We Want]). Besides this more specific association, the safety rights and preoccupations can be found in initiatives that don't have this special focus, around safe, critical and enlightened internet and mobile uses (Segura Net). E-Safety is also pointed by some organizations point to the need for safety online and specially target initiatives and courses (Miúdos Seguros na Net [Kids Safe on Internet]).

9 - “Problem Solvers” and “Digital Makers” (e.g. ERTE: the Digital literacies persuasion is also connected with this idea that there is a brave new world out there with new possibilities.

10 – Learning Labs and innovation and new methods – this idea is especially targeted to teachers (e.g. Ambientes Educativos Inovadores, [Innovative Learning Environments] and EduLabs)

11 – Entrepreneurship (e.g. CDI) - this is a program that arises especially in relation with young adults and adults, some of them at risk or vulnerability, such of unemployment and low income.

12 – Code - Learning how to Code and understanding advances in technology; code can help to make sense of how things work, explore ideas and act, for both work and play (e.g. ERTE, Scratch); this level is indicated in several initiatives, especially among the ones that are promoted by the ministry of Education; they are gaining an increasing interest mainly in the last two years; it is considered a future line of interests and relates with fun and ludic activities (e.g. games) and also serious matters. If we could predict the future, we could say that this is one of the most promising areas to work.

13 - E-learning - this is a concept either clearly identified either tangential in different initiatives, because these initiatives and programs sometimes have resources in online environments (Courses, tutorials, webinars, information regarding different issues, among others).

14 - Copyright - When individuals are online must also be aware of online Copyright rules, not knowing these subjects can even cause legal and financial problems for children (e.g., Miúdos Seguros na Net [Kids Safe on Internet]).
15 - *Advertisement* - Prepare especially chilgren and young people to critically read and interpret advertising, including online (e.g., MediaSmart, DecoJovem [Deco Youth]).
16 - *Media literacy* - this is a concept almost always related with initiatives, programs, courses, among others, not only because is historically a basic umbrella but also because segmental concepts have and intrinsically connection with this wider concept.

Besides above concepts mapping, we also found two important notions that point out that:

- By looking at activity/initiative/program in ministries and other governmental organizations, there is a widespread idea that to survive in current world (personal, professional, at school) one needs to have different skills, in different areas, and that this is a transdisciplinary process (e.g. RBEn). These proposals are mainly inter-disciplinary, literacies, actions. The digital and digital literacy needs are almost always in connection with.

- In the documents, "the notion of Digital Competence in the National Strategy for Digital Inclusion and Literacy is rooted in the assumption that the concept of "Competence" comprehends a set composed of of abilities, knowledges and attitudes that, when applied to practice, allow the person to achieve a certain goal” (ENILD, 2016). However, the document does not define DL and mentions that defining the concept is precisely a work to be done.

d. Cross geographies: how is the policy in your country cross-referenced to other EU countries?

It is clear that policy documents rely very much on EU legislation or guidelines, and on UNESCO as general framework for media education, especially in formal contexts. This happens at a macro level, in the case of documents dealing with economic strategies (first phase, until roughly 2010) and media education, by different entities, but also by academics and different stakeholders; but also at a micro level: in the Portuguese context there is an evident connection between different programs/contests/competitions in Portugal and in EU partners. This happens mostly in the framework of different programs/contests/competitions, especially in areas that have target teachers, students and parents.

The references are often raised to common European funds for implementation of projects. Some of the most relevant, considering activity/initiative/program in ministries and other governmental organizations, are: eTwinning (community of schools in Europe that supports teachers), the central support is settled in European Schoolnet, Internet Segura [Safer Internet]. There is also in some of the initiatives the idea that the measures can foster Portuguese skills comparing to Europe (Plano Nacional de Leitura [National Plan for Reading]).

e. Is there any legal policy framework?
One of the relevant sides of the legislation has to do with legal support for the online use of contents that go against the laws of the country. The fears are especially related with pedophilia, racism, and forms of using internet. The content of the website advises that the legislation can vary between countries (Internet Segura [Safer Internet]). The Strategy for Digital Inclusion and Literacy (ENILD, Portuguese acronym - TIC e Sociedade, 2015) was issued in 2015 and it is the first public consistent document on digital literacy - yet, it is not legally bound. In the history of similar Strategy and policy documents, it happens that they are often later incorporated in Government resolutions.

2. SCOPE

a. Stakeholders

1 - Visibility: considering activity/initiative/program in ministries and other governmental organizations, the most cited stakeholders that are also at the same time considered target groups are: parents, teachers, and students (e.g. ERTE). Adults are teachers and parents; and children and young people are students. When the initiatives have students and teachers, sometimes the roles are blurred, but some other times it is highlighted the importance of students' collaborative work as skills development, but the leading role is implicit to teachers that have to lead the classes (e.g. ERTE, SIC – Esperança, Liberdade de Expressão e Redes Sociais [SIC – Hope, Freedom of Expression
and Social Networking Sites)). One of the most visible exception is the initiative Web We Want that specifically says that they use resources that were produced by young people to young people.

Also families and parents are involved stakeholders, especially when initiatives highlight the importance of expanding the school work and learning to the house environment (e.g. EduLabs).

Besides the above situations, some of the opportunities are targeted to other individuals, such as eSkills, and the aim is more focused on non-school activities, specially directed to young adults and adults, concentrating also on job improvement skills to improve the ICT skills of lifelong learning. Another example is to consider the sick people and the actions that National System for Health is taking to improve the digital access to the system.

Among activities/initiatives/programs in ministries and other governmental organizations, there is a prevalence of school-related stakeholders, but it is also true that we found some identification of other educators, besides school related educators. Minority target groups are prisoners, ethnic minorities, handicapped, mentally-ill of different age groups associated with CDI Portugal. And also unemployed people for instance with eSkills for Jobs initiative and Low income adults, more that children and young people that are supplied by Programa Escolhas [Choices Program].

2 - Influence: ERTE/DGE - The great influence in the initiatives is devoted to public and also private schools, especially in compulsory education, i.e. up until the 12th grade (Even so, there are some initiatives that also target young children at preschool). Public libraries and public school libraries (RBE) are also some of the most powerful and effective stakeholders.

Portugal's is a case of multistakeholder involvement in the field of media education generally (GILM as an informal, multistakeholder group on media literacy) and digital literacy specifically. 'Rede TIC e Sociedade' [TIC Network and Society] is a multistakeholder entity, promoted by the national Foundation for Science and Technology (FCT - under the Ministry of Education and Science), with support from and involvement of several institutions from the State, companies and third sector. ENILD, the document that lays out the strategy for digital inclusion and literacy, also involves the Ministries of Regional Development, Economy, Environment, Territory and Energy, and Solidarity/Work & Social Security.

GILM is constituted by Comissão Nacional da UNESCO [UNESCO National Commission], Conselho Nacional de Educação [National Council for Education], Direcção-Geral de Educação [General-Directorate for Education], Entidade Reguladora para a Comunicação Social [Media Regulatory Body], Fundação para a Ciência e a Tecnologia [Foundation for Science and Technology], Secretaria-Geral da Presidência do Conselho de Ministros [General-Secretariat of Presidency of Council of ministers], Rádio e Televisão de Portugal [Portuguese Radio and Television], Rede de Bibliotecas Escolares [School Library Network], Centro de Estudos de Comunicação e Sociedade (Universidade do Minho) [Communication and Society Research Centre-Minho University], Maria Emília Brederode Santos (pedagogue and member of RTP's Conselho...
and Mi income target. Besides local especially about Igualdade whom discrimination establishes. Recent employment action risk than the Society], a these axis Program].

b. Special needs education policies

One of the most relevant programs in Portugal - the Programa Escolhas [Choices Program] Program - targets children and young people at risk created in 2004 a specific axis of intervention on Digital Inclusion, known as Measure IV), in order to capacitate these communities to deal, understand and use technologies as a way to have better skills in life. Like we see in different documents related with the field (Livro Verde para a Sociedade da Informação em Portugal [Green Book for Portuguese Information Society], 1997) referred to the need for measures to diminish differences in access to the information society, avoiding bipolarizations of inforich and infopoor people. More than 10 years later, Declaração de Braga [Braga Declaration] (2011) also established the need to surpass exclusion. Initiatives in this area are scarce and are especially target to risk communities (such as Escolhas and CDI). RadioActive (2013-) is a participatory action research project that targets young people at risk of exclusion from school and employment and uses internet radio as a tool for promoting the Key Competences for Lifelong Learning: European Reference Framework.

Recent documents (TIC e Sociedade [TIC Society], 2015/2016) point to the need to establish measures to diminish gender inequalities, citizenship concerns and discrimination (from 2014-2017), considering especially women and the elderly among whom there is a need to increase digital alphabetization (V Plano Nacional para a Igualdade de Género, Cidadania e Não Discriminação [V National Plan for Gender Equality, Citizenship and Non Discrimination], 2013). There are disperse initiatives about elderly, compared to some more centrality towards children and young people. Especially relevant are initiatives that take place at a regional level all over the country especially target to ICT activities and basic learning to use computers and internet (e.g. local governmental entities and civil society associations and projects such as LIDIA).

Besides these projects, in the majority of the cases we could not identify if special needs communities were integrated in the initiatives, but we know that initiatives especially targeted to schools and especially public schools also include neighbourhoods in low income areas. For instance, EduScratch project presupposes a partnership among the Ministry of Education and also with Comissão de Proteção de Crianças e Jovens [Child and Youth Protection Commission] (CPCI) de Setúbal, a commission targeted to at risk
children and youth. For instance the Referential of School Library Network (RBE) is also targeted to communities outside school and this opens the possibilities of uses, because RBE has some public material that can be easily adapted by children and youth centres.

As we have said before, there was also some concern with citizens' literacy regarding the uses of the National System of Health facilities - digital health literacy - and facilities specially target to deaf people.

Other concerns that intersect digital literacy with some technical competences have to do with services and banking, as offered by the Microsoft Curriculum, in association with the Government.

c. Contests to support DL

This field is relevant to the Portuguese reality, where contest/competition initiatives have a great prevalence among all initiatives (especially national initiatives). It is a initiative where the target public is stimulated and invited to participate for instance during a school year in a contest/competition for a final prize.

Some examples are:

1 - 7 Dias, 7 Dicas sobre os Media [7 Days, 7 Suggestions about Media] - It is a competition promoted by RBE with the support institution and leader of the initiative, although always with the collaboration of other partners: the Direção-Geral de Educação and the Fundação para a Ciência e Tecnologia, since the 1st edition; Comissão Nacional da UNESCO since 2015.

2 - “Conta-nos uma história!” [Tell Us a Story!] Contest - this is a contest that is promoted by the Ministry of Education, through the Direção-Geral da Educação (DGE), the Gabinete da Rede de Bibliotecas Escolares (RBE) and the Plano Nacional de Leitura (PNL) in partnership with Microsoft.

3 - Concurso MediaSmart [MediaSmart Contest] - Targeted to children 7-11 years old, it aims to increase critical reading and use of advertisement.

4 - Scratch Challenge – it is promoted by Centro de Competência TIC da Escola Superior de Educação do Instituto Politécnico de Setúbal (CCTIC-ESE/IPS), through EduScratch project and Associação Nacional de Professores de Informática (ANPRI), with the support of the Ministry of Education through Direção-Geral da Educação.

5 - Iniciação à Programação no 1.º Ciclo do Ensino Básico [Initiation to Code at Primary School] - Initiation to coding with a phase of internet evaluation of projects.

6 - Clubes de Programação e Robótica [Clubs of Code and Robotics] - With this contest DGE wants to support activities related with coding and robotics. It is targeted to schools.

7 - Sitestar.pt - this contest aims to promote digital media literacy, encouraging schoolchildren to create digital spaces in Portuguese and in the .pt domain. The purpose is to disseminate knowledge whilst promoting activities and initiatives of their interest and with relevance to the educational community. The contest is part of DECOJovem, the education project of DECO Consumer.
8 - Cineast@s Digitais [Digital Cineaste] - challenges young people to produce videos.
9 - SeguraNet Challenges [Challenges SeguraNet]: a competition that has been developed, since 2007, and is particularly significant because it is held within school context and receives the inputs of the educational community. There are two types of challenges: the Challenges for the first to fourth grade (6-10 years old) and the Challenges addressed to the fifth to nine grade (11-15 years old).
10 - Artistas Digitais [Digital Artists] - to use ICT in school and also the use of text and image.
11 - “Liberdade de Expressão e Redes Sociais” [Freedom of Expression and Social Networks] - by SIC Esperança in association with the public schools' libraries network (RBE), since 2013 it promotes multimedia production on the topic of freedom of expression in social networking sites; it targets 13-18 year old students and requires that a teacher is involved.

**d. Evaluation/Assessment mechanisms**

There is no consistent evaluation on these initiatives and their impact, centrally or individually.

In order to comply with the obligation, set out in the EC Directive for media education, a pilot study was conducted in 2014 (Pereira et al., 2015), to a sample of students from the last year of the secondary schooling (12th grade), so as to set the evaluation to disseminate later.

In Portugal there are several initiatives, programs, and promoters of media and digital literacy, maybe one of the major problems is that it is such a scattered field. This stems from the fact that the public policy does not have an adequate budget (Gabinete para os Meios de Comunicação Social was integrated in Presidency Ministry and lost autonomy) and it is diffusing between public bodies and the informal stakeholders. Therefore, there is not an accountability, which is also connected to the lack of evaluation (Jorge et al., 2015).

The document Rede TIC e Sociedade/FCT - Estratégia para a Inclusão e Literacia Digital [TIC Network and Society/FCT – Strategy for Inclusion and Digital Literacy] (2016) points to the need to evaluate digital competences, for instance at a national level. It is considered that evaluation mechanisms can give better tools to know where the most relevant problems are to act on them. It is even established that it is necessary to identify institutions that can provide training, promote digital competences acquisition and/or that can certify and validate digital competences accordingly.

There is also a Media, Information and Literacy Observatory (MILObs, in the original abbreviation), in Minho University, by commission of the GMCS (Gabinete para os Meios de Comunicação Social) since 2012, with the mission of collecting information on this field and advising public decision makers.

Besides the pilot study on media competences (Pereira et al., 2015), no other evaluation is known.

However, we can find some indications to consider aspects that could be evaluated. For
instance, Projeto MENTEP (Mentoring Technology-Enhanced Pedagogy) proposes that it is relevant to systematize competences of teachers, perceive their confidence, improve teachers’ digital competences, and training needs, Promoting stronger coherence between EU and national approaches to the assessment of Technology-Enhanced Teaching competence. Some of the initiatives, such as “Iniciação à Programação no 1.º Ciclo do Ensino Básico” [Initiation to Coding at Primary School], a recent relevant field for the Ministry of Education, states that there is a need to evaluate students to know the best way to deal with each type of implementation. It is suggested that teachers should have a grid to evaluate the sessions with students, like videos, photos and other type of registries.

One of the most relevant exertions is Referencial Aprender com a Biblioteca Escolar [Referential Learning with School Library] (Conde et al., 2012), that was evaluated in 2013-14, 2014-15 and 2015-16. These evaluations are centred in the three main areas (informational literacy, reading literacy and media literacy, this includes digital literacy) of the Referencial and highlight the collaborative work, connections with the time of direction of the activities, strategies of working with students, resources used and suggestions to improve the initiative. The least developed area (of the three included in the document) among schools is media literacy.

Another program that is evaluated, although not solely focused on the digital aspects, but as an overall program, is Programa Escolhas [Choices Program].

We must stress, however, that this evaluation aspect should be better perceived with interviewees with main actors (RBE, ME and FCT), because not all the data is available online.

e. Rights

The matters of rights were not always present in a direct form in the search we have done, they were mostly implicit.
1 – right of access.
2 – right to participation.
3 – right to have safety in internet (the most frequently reinforced on the results).

f. Identifying initiatives promoted by private companies

There are several initiatives promoted by private companies all over the country, some of them with connection to public entities and als at regional level.
Some examples:
1 - Media Smart (See c. Contests to support DL)
2 - Miúdos Seguros na Net - private initiative to support online safety.
3 - Público na Escola [Público at School] - Since 1989, The work that the Público na Escola develops intends to help students, teachers and educators to know and understand the world of the media. This knowledge is more fruitful if students and
teachers produce autonomous contents, which is why Público na Escola supports activities related to school journalism, including the promotion of digital newspapers production.

4 - Media lab (DN e Jn) - initiative promoted by two newspapers: Diário de Notícias and Jornal de Notícias, that targets young people, schools, adults and families in the production of newspapers.

5 - Deco (See c. Contests to support DL)

6 - Sapo - started as web portal (the first Portuguese) and also promotes initiatives in the field of digital literacy.

7 – Microsoft, in association with the Portuguese government, has produced and makes available for free a course on ICT.

8 - Artistas Digitais & Cineastas Digitais [Digital Artists & Digital Cineastes] - promotes the use of ICT in classroom for creativity, media and audiovisual production; it has regional scope; Artistas Digitais is targeted at students from 3 to 12 and Cineastas from 13 till 18, and teachers.

Other comments

3. FUTURE

a. Recommendations/Challenges

1 - To integrate a scatter field.
2 - To give better support to families and also to children and young people outside school.
3 - To work on social, gender and regional inequalities.

b. (Best) Practices /Case Studies

1 - Initiative Sete Dias com os Media [Seven Days with Media]: as we said before, it is promoted in the week of the Freedom of the Press (3rd May), and is more of a campaign, with no centralised control, nor evaluation.

2 – Programa Escolhas - Centros de inclusão digital, prepared for youth at risk of exclusion.

Other comments
4. BIBLIOGRAPHY


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5. ESSENTIAL WEB LINKS

DECO
ERTE
Miúdos Seguros na Net
RBE
Sete Dias com os Media
Programa Escolhas
Portal da Literacia Mediática

6. IDENTIFICATION OF EXPERTS
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<tr>
<th>Name</th>
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<td>Teresa Pombo</td>
<td>Ministry of Education</td>
<td>Member of the Team of Resources and Educative Technologies and is Professor of Portuguese</td>
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<tr>
<td>Ana Cristina Neves</td>
<td>Foundation for Science and Technology - Department for the Information Society</td>
<td>Director</td>
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