



PRESENTACIÓN

# Digital competences and media literacy for an open and online education

***Competencias digitales y alfabetización mediática para una educación abierta y en línea***

***Competências digitais e alfabetização midiática para uma educação aberta e online***

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### **Abstract:**

We live in a society where physical and virtual reality are increasingly intertwined. The boundaries between the body and the imaginary gain new contours and definitions, affecting important and essential aspects, such as the power of participation and emancipation of the individual in the society in which he/she is inserted. The rapid pace of the technological and digital society makes it essential that both teachers and students know how to use different digital resources to create and develop learning environments that lead not only to the acquisition of knowledge, but also to scenarios that promote the development of different learning skills. Recently, the emphasis given to

the relevance of digital competence has resulted in the development of various initiatives in Europe aimed at promoting digital and media competence. In addition, evaluating media in a critical and conscious way, developing the skills necessary to participate in an active and informed way in society, is considered today a fundamental competence for an increasingly mediated society and also for an education that increasingly moves in a fluid way between formal and non-formal spaces. To this end, it is necessary to rethink the objectives and methodologies of education, based on a concept of literacy that is continuously evolving, related to the skills needed to read, understand and communicate.

## **KEYWORDS**

Digital technologies, Media literacy, Learning, Open education, Online education.

## **Resumo**

Vivemos em uma sociedade onde a realidade física e virtual estão cada vez mais interligadas. As fronteiras entre o corpo e o imaginário ganham novos contornos e definições, afetando aspectos importantes e essenciais, como o poder de participação e emancipação do indivíduo na sociedade em que está inserido. O ritmo acelerado da sociedade tecnológica e digital torna imprescindível que professores e alunos saibam utilizar diferentes recursos digitais para criar e desenvolver ambientes de aprendizagem que conduzam não só à aquisição de conhecimentos, mas também a cenários que promovam o desenvolvimento de diferentes habilidades de aprendizagem. Recentemente, a ênfase dada à relevância das competências digitais resultou no desenvolvimento de várias iniciativas na Europa com o objetivo de promover as competências digitais e midiáticas. Além disso, avaliar os meios de comunicação de forma crítica e consciente, desenvolvendo as competências necessárias para participar de forma ativa e informada na sociedade, é hoje considerada uma competência fundamental para uma sociedade cada vez mais mediada e também para uma educação que se move cada vez mais de forma fluida, entre espaços formais e não formais. Para tanto, é necessário repensar os objetivos e as metodologias de ensino, a partir de um conceito de alfabetização em constante evolução, relacionado às habilidades necessárias para ler, compreender e comunicar.

## **PALABRAS-CHAVE**

Tecnologias Digital, Alfabetização midiática, Aprendizagem, Educação aberta, Educação online.

## **Resumen:**

Vivimos en una sociedad donde la realidad física y virtual están cada vez más entrelazadas. Los límites entre el cuerpo y el imaginario adquieren nuevos contornos y definiciones, afectando aspectos importantes y esenciales, como el poder de participación y emancipación del individuo en la sociedad en la que se inserta. El vertiginoso ritmo de la sociedad tecnológica y digital hace imprescindible que tanto docentes como alumnos sepan utilizar diferentes recursos digitales para crear y desarrollar entornos de aprendizaje que conduzcan no solo a la adquisición de conocimientos, sino también a escenarios que promuevan el desarrollo de diferentes habilidades de aprendizaje. Recientemente, el énfasis dado a la relevancia de la competencia digital ha dado lugar al desarrollo de varias iniciativas en Europa destinadas a promover la competencia digital y mediática. Además, evaluar los medios de comunicación de forma crítica y consciente, desarrollando las habilidades necesarias para participar de forma activa e informada en la sociedad, se considera hoy una competencia fundamental para una sociedad cada vez más mediatizada y también para una educación que se mueve cada vez más de forma fluida, entre espacios formales y no formales. Para ello, es necesario repensar los objetivos y metodologías de la educación, partiendo de un concepto de alfabetización en continua evolución, relacionado con las habilidades necesarias para leer, comprender y comunicarse.

## **PALABRAS CLAVE**

Tecnologías digitales, Alfabetización mediática, Aprendizaje, Educación abierta, Educación en línea.

Advances in digital technologies have decisively stimulated learning beyond formal educational structures. Indeed, learning in informal web spaces is now a challenge for the network society, as these environments bring together authentic life and learning experiences, which constitute the core of in-context experiences that feed the knowledge network (Downes, 2006).

Therefore, it is almost consensual that the use of digital media and its tools in educational settings implies more participatory, collaborative and social models centred on the different educational actors. However, change should not be seen only from a technological point of view, but ought to be considered, above all, in terms of mentality and practice. This reality implies a cultural change, as it requires rethinking the roles of teachers and students, and the relationship and the balances existing between them, besides the implications at the level of course and curriculum planning, evaluation systems, ways of teaching and learning. In fact, a school that focuses on learning will be the one that will also make a reflected, critical and thoughtful use of all the resources and all the strategies that digital technology allows. For that to happen, it is also important to understand the different skills that make up the digital and media competences in Education and then seek the adequate training to keep up with the evolution of digital technologies and identify how these can best serve the objectives of each teacher and each student.

In the current European context, “learning to learn” has been effectively considered, in several official documents, a key competence necessary in the knowledge society, implying, on the one hand, that the individual is aware of his/her own learning method and needs, identifying the available opportunities and, on the

other hand, that he/she is able to remove the obstacles to successful learning.

To this end, it is necessary to rethink goals and methodologies, based on a concept of literacy that is in continuous evolution, related to the skills needed to read, understand and communicate (Aguaded-Gómez & Pérez-Rodríguez, 2012; Gutiérrez & Tyner, 2012).

This ability to adapt takes on particular importance when recognising the need to keep up with change, know one's digital skills and know also to make effective use of digital tools with a view to social participation, joint work involving communication, critical thinking and problem-solving skills (Cartelli, 2010; Martin & Grudziecki, 2006).

Recently, the emphasis given to the relevance of digital competence, has resulted in the development of several initiatives in Europe aimed at promoting digital and media competence (Vuorikari et al., 2016; Carretero et al., 2017).

With regard to young people, and given the fast pace of technological and digital society, it is essential that they know how to use and evaluate media critically and consciously, developing the necessary skills to participate in an active and informed way in society (Matos, Festas & Seixas, 2016).

The benefits of combining digital and media literacy and the extended approaches developed in media education over many years to cover digital media are highlighted by different authors, such as Buckingham (2009), as a strategy to overcome these risks and reinforce a critical dimension of literacy. International institutions, such as UNESCO and the EU, have also promoted research and intervention in the field of digital and media literacy (EU, 2007; Wilson et al., 2011; UNESCO, 2013) and this international context has led to the development of

this domain in different countries. For example, in Portugal, several initiatives have been developed, such as the National Education Council (2011) or Portugal INCoDe.2030. Also relevant are the studies carried out in Spain, which led to a definition of a set of dimensions (language processes, technology, production and dissemination, ideology and values, interaction processes and aesthetic dimension) that configure the concept of media literacy competences (Ferrés, 2007; Ferrés & Piscitelli, 2012).

For this reason, it was considered fundamental to promote a space for sharing work that focuses on the development of digital and media skills in the context of an open and networked education, and on the importance of creating educational spaces that favour the development of learning strategies that motivate and provide for the development of different skills by both teachers and students, since they facilitate an interaction between what are their digital social skills and a more active and constructivist attitude with regard to access to knowledge.

Sharing, in the same space, this knowledge is particularly important, especially because it is an opportunity to cross digital skills and media literacy, which, for example, for institutions like the European Union is recognized as one of the most relevant issues for the benefit of education and society and not only in the face of the adversities faced due to the pandemic that the world is experiencing. This recognition assumes a prominent place in the strategic guidelines for Europe and the world for the coming years, making the preparation of a thematic dossier dedicated to “digital and media skills in an open and networked education” of relevance for the international society.

The first article in this dossier, “Technologies and digital literacy”, from Beatriz Oliveira de Almeida, Lynn Rosalina Gama Alves and André

Luis Mattedi addresses an experience with Zotero, and aims at analysing forms of interaction between university students with this software, in face of new ways of reading and writing in the contemporary context, concluding from the analysis of their results that these students seem to struggle to become literate in digital environments, especially, as the authors state, those that require prior knowledge of standardization for academic works such as Zotero.

Marcos Cabezas González, Sonia Casillas-Martín and Ana García-Valcárcel Muñoz-Repiso, in their article “Socio-familial and technology use profiles of compulsory education students with a high level of digital competence in the area of communication”, evaluate the digital competence in the communication area of Spanish compulsory education students and identify the socio-familial and technology use profiles of those who obtained the best results. The authors identified, from the analysis made, that socio-familial variables and the use of technology positively influence the development of the competence of digital communication.

“Digital divide in the didactics of basic education teachers” is the title of the article written by Javier Tarango, Victoria García-Prieto and Fidel González-Quiñones with the aim of diagnosing the existing distance in the access, use and appropriation of ICT in teachers. The research made allowed the authors to identify some behavioral traits of teachers, such as use focused on conventional technologies, low access for academic purposes and high learning needs through training processes.

Cassio Santos, Neuza Pedro and João Mattar authored the fourth article, regarding “Digital competence of higher education professors”. Based on the DigCompEdu framework as a theoretical reference, and a quantitative approach, the authors analysed the differences

associated with the variables of teaching and institutional nature in the level of proficiency of teachers in digital competences. The results show that characteristics such as working at PhD program level, teaching online and being linked to polytechnic institutes are associated with higher levels of digital competence.

“Technology integration in secondary education in Portugal from the 1970s to the present day” is the title of the article written by Sara Dias-Trindade, José António Moreira and António Gomes Ferreira and focuses on a systematic literature review to analyse pedagogical experiences using technology in Portugal, between the 1970s and the present day. The authors conclude that, despite some conservatism in the use of technology, still very focused on its instrumental use, more practices with a pedagogical intent and more focused on the active participation of students have been implemented in recent years.

Closing the thematic dossier, Eniel do Espirito Santo, Tatiana Polliana Pinto de Lima and Adriano Dantas de Oliveira present the readers with a study on “Digital competencies of educators”, which also bases its theoretical reference on the DigCompEdu framework and presents the results of the DigCompEdu CheckIn self-assessment scale applied to Brazilian Elementary school teachers. This study showed gaps in the teachers’ professional and pedagogical competencies, as well as while developing their students’ competencies, and the need for the pedagogical use of technologies as promoters of student learning and emancipation to be included in educator’s continuous education.

This edition of *Obra Digital* includes, still, two more articles, that also show the importance of a communication based on or making use of digital environments to enhance practices, strategies and narratives.

The first one, from Elisenda Ardèvol and Sandra Martorell – “Lifestyle, Activism and Consumption in Environmental Influencers on Instagram” – presents part of an ongoing study about the relationship between this activism, lifestyle and personal narratives on Instagram. From the initial results, Ardèvol and Martorell are already able to state that the role of the “eco-influencer” opens up a new form of social activism based on promoting a sustainable lifestyle in which images play a fundamental role.

The second and final article, “The role of narrative persuasion in Edu-Entertainment to improve health in Latin America”, from Alicia Camelo, Catalina González-Cabrera and Elizabeth Vargas-Rosero, is a systematic literature review on narrative persuasion research in health communication in Latin America. This research showed that there is still a need to know more on how narratives can influence preventive and risk behaviours in health to try and demonstrate how powerful these strategies are in generating attitudinal and behavioural changes and help those who take decisions in the health area to create public policies based on empirical evidence.

We hope that reading these texts may contribute to broaden knowledge about media and digital competences, but that it may also provide new ideas, new challenges and new research projects that will thus contribute to increase international knowledge in these areas.

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