

The value of digital literacy

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The notion of digital literacy is frequently unclear or too broad. Some speak even of “digital literacies”¹, “new literacies”², or even multiliteracies. It may be useful to distinguish between a conceptual definition and a standardized operational one³, the first as an extension of the literacy concept to the understanding of information provided in digital format enabling individuals to become engaged in social life through the use of media, while the second is the capacity to execute tasks or demonstrate skills, using specific cognitive-thinking orders to use digital information. In today’s world we have, in general, to use both concepts, either to fully exercise citizenship and participation in a global community, or to better perform in the context of a professional activity. In this presentation we will emphasise the importance of digital literacy, in the first part as a technical and scientific competence that will enhance individual and collective professional value in the knowledge society, and in the second part as a basic competence for the whole society at depths that can vary substantially, still having to assure, in all cases, an essential minimum value.

At present in practically any profession the ability to use software and to operate digital devices is a basic requirement. However, quite often more than that is necessary, namely “a large variety of complex cognitive, motor, sociological, and emotional skills [...] for example, “reading” instructions from graphical displays in user interfaces; using digital reproduction to create new, meaningful materials from existing ones; constructing knowledge from a nonlinear, hypertextual navigation; evaluating the quality and validity of information; and have a mature and realistic understanding of the “rules” that prevail in the cyberspace.”⁴ Without such competences, the capacity to get a good job drops significantly.

However, in other professions, a more advanced knowledge in computer science and engineering is required, be it to work in software development or in industries and services that require it for purposes like advanced planning, robotization, digital simulation of processes and products, information retrieval, machine learning and other AI methods. These professions will surely be among those that will bring a larger added value, well-being, sustainability and last but not the least, the capacity to keep the environment where we live, under control.

Digital technologies permeate significant aspects of our lives and digital literacy is needed to perform quite different tasks from education to management, from communication to creation.

As Eshet-Alkalai says, digital literacy is a “survival skill in the digital era”. To make sure that the whole population in its diversity and different qualifications have access to a set of skills that enable them to communicate and critically understand information is a matter of social justice.

As digital literacy requirements change to keep pace with the changes in information technologies, people have to acquire new skills to participate in the global knowledge economy. And if this may be easier for young generations that view themselves as digital creators, while others are caught in the convergence of old and new media and others, still, due to age, gender, geography, ethnicity or social and cultural backgrounds are in a worse situation to benefit from digital technologies and their opportunities. That is why it is “important to make sure that all young people and adults have the opportunity to acquire the required competences in initial education and training, higher education, continuous professional training, adult education or different forms of non-formal and informal learning”⁵.

But even young people are affected by persistent inequalities and being “digital native” is not really a transversal condition. Being familiar with and using digital technologies on a daily basis does not necessarily mean to use it skilfully. There is a debate taking place on the necessary skills for the 21st century, influencing training and educational approaches, pedagogies and curricula design that should promote competences in design thinking, programming and creative problem solving as a means to enhance opportunities for fully exercising citizenship and having equitable opportunities for the growing demand of technical profiles

1 Ba, Tally, & Tsikalas, Investigating Children’s Emerging Digital Literacies in The Journal of Technology, Learning, and Assessment, August 2002

2 Leu, D., Zawilinski, L., Castek, J., Banerjee, M., Housand, B., Liu, Y., & O’Neil, M. (2007). What is new about the New Literacies of online reading comprehension? In L. Rush, A. Eakle & A. Berger (Eds.), *Secondary school literacy: What research reveals for classroom*. Urbana, IL: National Council of Teachers of English.

3 Lankshear, C. & Knobel, M. in the introduction of “Digital Literacies—Concepts, Policies and Practices”, Peter Lang Publishing, 2008

4 Yoram Eshet-Alkalai, Digital Literacy: A Conceptual Framework for Survival Skills in the Digital Era, in JI. of Educational Multimedia and Hypermedia (2004) 13(1)

5 European Commission (2018) *Digital Education Action Plan*. Brussels: European Commission, p. 4.