DEFINITION OF THE 'EDUCATION CHALLENGE'
FUNDACIÓN TELEFÓNICA (PUB. 2016)

TITLE OF THE CHALLENGE

Educating for the digital society

How to improve students' skills so they can take advantage of all the opportunities offered by the digital society.

DESCRIPTION

The requirement

The UNESCO *World Summit on the Information Society* held in Paris in 2013[1] called upon the various public and private agents to consider not only solutions for addressing the challenge of access to and use of ICT for development, but also to guarantee that present and future generations would benefit fully from the transformative potential of new technologies.

Furthermore, within the framework of the Education 2020 Agenda established by the European Commission, one of the priority areas is to improve the acquisition of relevant, high quality skills and competencies for employability, innovation and active citizenship. In societies where technology is increasingly setting the pace of social and labour trends, these skills and competencies must by necessity be geared towards use in highly digital contexts.

In relation to employability in the digital environment, one of the most important initiatives was the *Grand Coalition for Digital Jobs*[2] launched by the European Union in March 2013, with the goal of uniting efforts to address the lack of digital skills and cover the growing demand from industry for ICT professionals across the whole continent. According to this institution, by 2020 we could be facing a shortfall of almost 900,000 ICT professionals, a figure in stark contrast to the 25 million Europeans who are currently unemployed. Outside the professional ICT sector, it is estimated that in the near future some 90% of jobs will require digital skills.

[1]UNESCO (2013). *Towards Knowledge Societies for Peace and Sustainable Development. First WSIS+10 Review Event*. Paris. [Online] http://unesdoc.unesco.org/images/0022/002246/224604e.pdf [Most recent view: 14 February 2015]

[2]https://ec.europa.eu/digital-agenda/en/grand-coalition-digital-jobs-0

This deficit in human resources for the digital industry is a recurring barrier in regions such as Latin America. By way of illustration, if we look at the "simple correlation between economic development and the production of engineers, Latin America would need to increase the number of engineering graduates from the current 143,518 by 48% (equivalent to 212,406; in other words, another 68,889 graduates)". (Katz 2015:300)[3].

But this requirement goes even further than the labour demand in the sector. According to UNESCO[4] and the European Union, **every citizen will need to have at least the basic digital skills to be able to live, work, learn and participate in society**. And while it is true that technological progress has moved very swiftly, this has not been matched by the speed of acquiring the necessary skills to understand, manage and make the most of digital tools. We still need to develop our skills to align ourselves with the massive cultural changes thrown up by technological advances and take advantage of all the opportunities that this involves, both individually and collectively.

There is a need to re-examine the educational process with a view to developing scientific, technological and digital skills[5] that not only focus on the management of technological tools but also on the capacity to learn, work with others, participate and create in a digital society.

The response strategy

Digital skills can be defined as "the combination of abilities, knowledge, skills and attitudes that serve to achieve objectives efficiently and effectively in highly digital contexts" (Magro and Salvatella, 2014)[6].

[3]Katz, Raul (ed) (2015), *The Ecosystem and the Digital Economy in Latin America*. Barcelona: Fundación Telefónica; Ariel; Editorial Planeta.

[4]UNESCO (2015), *Rethinking Education. Towards a global common good?* Paris: UNESCO.

[5]See *Rethinking Education Strategy* at: http://europa.eu/rapid/press-release_IP-12-1233_en.htm

[6]Magro, C., Salvatella, J. (coord.) (2014). *Eight Digital Skills for Professional Success*. Barcelona: RocaSalvatella. Online: http://www.rocasalvatella.com/es/8-competencias-digitales-para-el-exito-profesional (Most recent view: 13 October 2015)

These skills include those known indistinguishably as 'transferable skills', '21st century skills', and 'non-cognitive skills', which are communication, digital literacy, problem-solving, teamwork, and a corporate spirit" (UNESCO 2015:64).

Following the approach of Magro and Salvatella (2014), which addresses professional digital skills (very important when it comes to steering the education of our young people), it would be worth focusing the educational process on five of these key skills:

1. Digital knowledge: This entails having an in-depth understanding of the digital environment and the nature, role and opportunities it generates in every aspect of our lives. It thus requires people to have scientific and technological skills, as well as technical knowledge, in order to understand, produce and present sets of complex information.
2. Information management: The ability to search for, find, assess, organize and share information in digital contexts.
3. Digital communication: The ability to communicate, maintain relationships and collaborate efficiently with digital tools and in digital environments.
4. Networking: The ability to work, collaborate and cooperate in digital environments.
5. Continuous learning: The ability to manage learning autonomously. This entails skills such as understanding and using digital resources and taking part in learning communities.

In this context, it is especially important to identify and scale educational initiatives which in formal, non-formal and informal spheres efficiently develop these digital skills at the pre-university stage. This would establish the foundations for young generations to tackle educational and professional itineraries that will enable them to develop these skills and make a full contribution to the digital society.