

ICT TRENDS IN EDUCATION

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Abstract:

The Information and Communication Technologies (ICT) are more than ever living in our society and there are important parts of the education. Schooling and teaching is changing with this new context. ICT have some characteristics that make them an essential tool in our daily life and, for instance, in our schools. New Technologies have changed the way we communicate and the way we live and work. For this reason ICT in Education is an approach that makes the school and the society closer. The XXI century education should follow these conceptions with the desire to contribute positively to the development of a better society and more critical citizens.

Key Words: ICT, Education, schools, society

Introduction:

The pace of the society in which we live requires more flexible ways of learning and adapted to changes. Formal, non formal, informal and invisible learning are living today in an expanded education and in a virtual space through the network. The Information and Communication Technologies are more than ever living in our society and they are important parts of the education. At Primary and Secondary Education, students start to use them in class, but the reality is that nowadays almost every student goes to school with a wide range of technological skills.

Schooling and teaching is changing with this new context. For example, students and teachers should have technological skills because they use them in their classroom and in their curricula. ICT have some characteristics that make them an essential tool in our daily life and for instance in our schools.

Also, it is very important to know that ICT are not only about computers and the internet, but also about a big amount of different tools such as mobile phone, tablets, etc. New Technologies have changed the way we communicate and the way we live and work. For this reason ICT in Education is an approach that makes the school and the society closer.

In this article we will focus on the role and different kinds of ICT in education and in the main characteristic that nowadays technologies have.

ICT at school:

According to UNESCO (2010), the term ICT is plural, referring to a great many technologies and it is an all encompassing term that includes the full gamut of electronic tools by means of which we gather, record and store information, and by means of which we exchange and distribute information to others.

ICT are composed of many different tools that enable capturing, interpreting, storing and transmitting information in a fast and easy way. In the following figure (UNESCO, 2010), we can observe several options which allow us to better understand the society where we live:

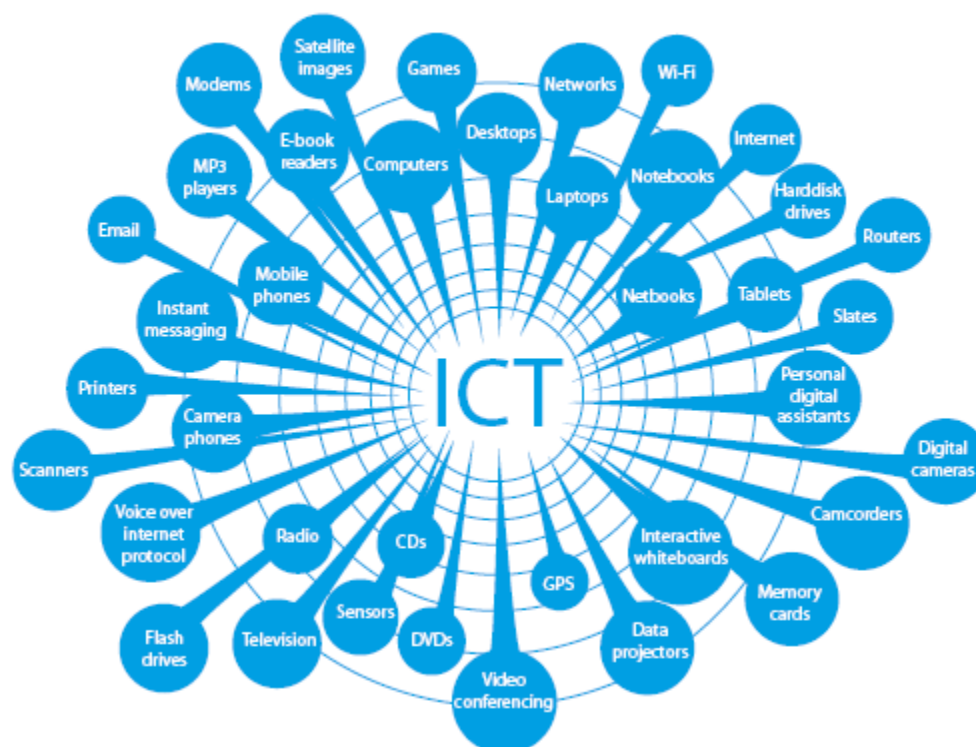


Figure 1. ICT. Font: UNESCO (2010)

This large number of tools makes our life easier and they are very helpful in organizing the big amount of information that we receive each day. We know that we do not use all of them everyday but also we know that students are in continuous contact with them and we cannot ignore it.

For this reason, the changing role of teachers is an essential issue. There is a need to move from a “push educator” to a “pull educator”. The first one fills the heads of their students with content without causing any activity or desire in them in order to deepen the knowledge and the potential of the resources around them. The second one awakes in students the motivation to learn and will help them in the sought of meaningful information that generates knowledge.

A good starting point, according to Anderson and van Weert (2002), is to join with fellow enthusiasts at the school, to meet together informally to talk about ICT issues and share knowledge. This process where two or more teaching colleagues work together to discuss problems, share experiences and provide support for one another with a view to improving their teaching is often called peer coaching.

According to Graham (2006), a good use of online learning stimulates active learning in the classroom, which motivates students to continue learning activities beyond the lecture hall or classroom. Such online learning, then, in combination with sound face-to-face teaching (blended learning) is a powerful approach to learning. Both students and professors can take advantage of these ways of learning and communication.

Main ICT’s characteristics:

Laudon and Laudon (2010) state that the most important drive behind globalization has been the explosion in Information and Communication Technologies (ICT) sectors. For these authors the main ICT’s characteristic are:

- *Mobile Learning*. New advances in hardware and software are making mobile “smart phones” indispensable tools.
- *Cloud computing*. The implications of this trend for education systems are huge; they will make cheaper information appliances available which do not require the processing power or size of the PC.

- *One-to-One computing*. The trend in classrooms around the world is to provide an information appliance to every learner and create learning environments that assume universal access to the technology.
- *Ubiquitous learning*. School systems around the world are developing the ability to provide learning opportunities to students “anytime, anywhere”.
- *Gaming*. The phenomenal success of games with a focus on active participation, built in incentives and interaction suggests that current educational methods are not falling short and that educational games could more effectively attract the interest and attention of learners.
- *Personalized learning*. Education systems are increasingly investigating the use of technology to better understand a student’s knowledge base from prior learning and to tailor teaching to both address learning gaps as well as learning styles.
- *Redefinition of learning spaces*. Schools around the world are re-thinking the most appropriate learning environments to foster collaborative, cross-disciplinary, students centered learning.
- *Teacher-generated open content*. OECD school systems are increasingly empowering teachers and networks of teachers to both identify and create the learning resources that they find most effective in the classroom. Many online texts allow teachers to edit, add to, or otherwise customize material for their own purposes, so that their students receive a tailored copy that exactly suits the style and pace of the course.
- *Smart portfolio assessment*. The collection, management, sorting, and retrieving of data related to learning will help teachers to better understand learning gaps and customize content and pedagogical approaches.
- *Teacher managers/mentors*. The role of the teacher in the classroom is being transformed from that of the font of knowledge to an instructional manager helping to guide students through individualized learning pathways.

Conclusion:

ICT are indispensable to the functioning of modern societies, these same technologies are equally indispensable to learning institutions. Students and professors should address this change in our society as a chance to improve our educational practices in order to achieve an education with quality.

The changing role of teachers, as we saw before, is an essential part of this changing process. Their role should turn in a “guide of learning” better than in a “font of knowledge”. As ICT are incorporated in education the trend of a classroom and textbook based educational system is becoming more and more outdated.

It can clearly be seen that the education system should change to adapt to modern requirements and to incorporate new technologies. By incorporating these technological trends into the educational system a higher quality education can be provided at a cheaper cost and spread over a larger segment of the population.

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