Chapter 1

The Integration of Information and Communication Technology in Schools: Online Safety

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ABSTRACT

Youngsters today grow in an environment of technological development but, nevertheless, exhibit unknowns regarding aspects relating to the use of these tools in a productive way, as regards the aspects relating to safety and correct use. The integration of technology in schools has thus increased responsibilities by the need to incorporate these developments safely and at the service of education. At a time when the concept of use of technology is seen as a skill rather than a tool, the challenges faced by the school administration and teachers are great and they try to resolve through some of the available resources and new business developments. However, much remains to be studied and developed. This chapter aims to present some perspectives of this scenario. It also presents a study conducted in some schools, and some developments that are being considered in this area.

INTRODUCTION

The integration of technology in school has not been easy or a pacific subject. It implies a wide range of areas in a school administration, and school community.

Since the early stages of integration of Information and Communication Technologies (ICT) in classes, the teachers and the students had to adapt and get new skills. From the controlled environment in a class room prepared with a few computers for the students access, to the days of the mobility and
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web 2.0 contents, the opportunities and the challenges, the technologies have a great change and so the skills and possibilities of the students and teachers.

The teachers faced the challenge of bring new ideas to the class and find new ways to transmit the knowledge.

On other hand, the students have grown surrounded by these technologies and with a great incentive to use them and explore.

The challenges that this integration brought, covers factors like choose which tools to adopt, how to integrate and access students’ skills, how are the teachers prepared to integrate the new technologies, how the schools integrate those technologies and what problems and opportunities those technologies brought to the schools and the learning environment.

Also the concerns to the safety problems due to the internet access were in some cases not considered, in others cases considered mostly by advise of organizations in the medium and in few cases the schools adopted some integrated environments.

Schools today experiences the challenge of promote the use of new technologies providing all the opportunities of the web 2.0, and keeping a safe environment for the children and young students. Also, provide a private access and public access to information about the school to students and information for parents and the community outside the school. Maintaining a trusted environment, updated and protected.

The implementation of this environment sometimes is not easy and most of the times is under government criteria and funds, and bounded by the qualifications and skills of the teachers. And sometimes, it becomes a negotiation between the resources available and the school goals and capabilities.

Researchers need to be aware of the changing nature of ICT in education. Since the formulation of compulsory ICT curricula by national governments, ICT is moving from a bottom-up innovation situated at the teacher level, to a compulsory top-down innovation with responsibilities at the school level. In this changing context, schools-as-organizations appear as the unit of change. (Vanderlinde, Brakk, & Dexter, 2012)

This chapter attempts to present a view of the integration of the ITC in schools, trying to show the aspects related to the challenges presented to teachers inside the classroom and in connection to the outside in terms of availability of resources, to the school administrations and school community.

It also tries to present the threats this learning environments, and today technologies, presents in the context of the school, the society, and the youngsters of the “net generation”.

Finally it presents a study that was realized in the way to understand how the technologies were integrated in the schools, how the teachers were prepared to this challenge, and how the students deal with it and the aspects concerned the safety online.

This is an important matter that has some complexity and responsibility for the youngsters and for the society in general, today and in the future. The innovations are going to continue, as so the discussions about the integration in schools and the way to turn in effective learning environments. It is also a subject with many variables and uncertainties, as the outcomes of the integration of this technologies in school can only be really evaluate in the future generation. Many discussions about implementations and better learning environments still are to come.
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