# Chapter 2 **Technology Integration in UAE Schools**: Current Status and Way Forward

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## ABSTRACT

Research has supported the assumption that computer technology is beneficial for students' performance. Nevertheless, knowing that technology is beneficial is not sufficient on its own where teachers remain the key stakeholders in the success of the process. Teachers need to be aware of various issues, challenges, and ethical aspects when using technology for teaching, with such aspects being alleviated further in a young country with a conservative society such as the UAE. The chapter offers an overview of the Net Generation and computer technologies' impact on student performance. It provides a briefing about the United Arab Emirates (UAE) and its educational system while highlighting formal initiatives launched by the government to support the educational reform and introduction of technology into the K-12 classroom. Finally, the chapter presents preliminary findings from a research study that investigates teachers' perceptions about technology integration and their current practices in a UAE private school.

## INTRODUCTION

No one can deny the current importance of computer technology and the level to which it has pervaded our daily lives. Its impact on different aspects of our communities is escalating on a daily bases and is being sensed more than ever before. The domains in which technology is getting to be significant and fundamental are highly varied and include entertainment, knowledge retrieval, governmental services, transmission of information, business transactions, health services, and communication across various areas around the globe.

Within the educational context, computer technologies' impact is increasing on a continuous basis. Research has supported the hypothesis that computer technology is beneficial for students' performance. However, the naïve assumption that introducing computers into the classroom and providing the technological infrastructure will lead to the successful integration of technological tools into the teaching and learning process has not been reflected in reality. While the actual impact of the teachers' role is not fully understood, the plethora of research conducted worldwide indicates that the actual success of technology integration is highly dependent on the teachers' perceptions, skills, and ability to utilise technology within pedagogically adequate frameworks. After all there are various issues, challenges, and ethical aspects that are to be considered when the decision is taken to introduce technology into the K-12 classroom. Such aspects are augmented further in a young country with a conservative society such as the UAE.

This chapter will offer an overview of the net generation and computer technologies' impact on student performance. In addition, it will provide a briefing about the United Arab Emirates (UAE) and its educational system while highlighting formal initiatives launched by the government to support the educational reform and introduction of technology into the K-12 classroom. Finally, the chapter will present preliminary findings from a research study that investigates teachers' perceptions about technology integration and their current practices in a UAE private school.

# **Technology and the Net Generation**

At the beginning of the 21st century, many individuals may have brushed off the notion that in less than a decade two-year-old children from middle socio-economic classes will be solving electronic jigsaw puzzles in addition to many other games on iPhones and iPads. Clearly, time has proven otherwise. One decade after the start of the 21st century and our children's relationship with technology is accurately depicted by the quote "they say one of a baby's first non-verbal forms of communication is pointing. Clicking must be somewhere just after that" (Computer Quotes, 2008). According to Oblinger and Oblinger (2005) students currently going to high schools and colleges were born and have grown up in a digital supported environment with at least 20% of them having started using computers by the age of five and eight. After six years, and in the fast paced technological changes we are witnessing, it would be reasonable to assume that the percentage has at least doubled.

In the spring of 2003 an extensive survey was conducted in the USA with more than 1000 parents of children younger than six years. Results unsurprisingly revealed that USA children are growing immersed in technology (Rideout, Vandewater, & Wartella, 2003). Based on the results, more than half the children start working with the computer at the age of four and almost 30% of them spend more than one hour a day working at the keyboard. Findings related to other forms of technology use such as the TV, video, and video games reveal a higher level of usage by the children. A more recent Kaiser Family Foundation study revealed that the years from 2005 to 2010 witnessed an extensive increase in different forms of media usage including mobile and online media (Rideout, Roberts, & Foehr, 2005). Specifically findings revealed that young people aged between eight and eighteen years spend more than seven hours daily working with electronic media.

While there are no formal research findings that provide concrete evidence or information about children's use of technology and media in Middle East countries, it is safe to say that the situation is not very different from that in the USA. On the contrary, it would not be misleading to assume that the availability of technological tools and children's connectivity may be higher in certain Middle Eastern countries such as the United Arab Emirates due to the economic situation. In addition to the TVs, computers, and laptops, children in the UAE have access to the newest releases of the different technological tools including iPads, iPods, and smart phones.

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