

# Chapter 17

## Digital Citizenship Instruction in K–20 Education

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### ABSTRACT

*As technology advances, so do the techniques for abusing it. While traditional crime has not increased in some countries, cyber crime is becoming increasingly common and steadily growing. One of the duties of educators is to teach the learning community about digital citizenship so everyone can understand, address, and prevent technology abuse. This chapter defines digital citizenship, discusses its ramifications on individuals and the learning community at large, and recommends strategies for digital citizenship education.*

### INTRODUCTION

The world is changing faster than ever because of socio-economic factors, which have been significantly impacted by technology. As the world seems to grow smaller, due to increased communication and population transience, the global scene reflects a more interactive mode relative to information. Economic and social activities rely on information and communication technologies. Knowledge is ever-flowing, and social interactions seem Web-like (Daniel, 2009).

Therefore, the need for critical use of information is more important than ever. In a digital world where the amount of information doubles every two years, individuals need to evaluate resources carefully and determine how to use relevant information to solve problems and make

wise decisions. It is no longer principally an issue of getting information: it is getting the right information at the right time to do things right and to do the right things.

This changing informational environment affects education, and also emphasizes the need for lifelong education to prepare today's workforce to deal with an uncertain tomorrow. Moreover, Since 85 percent of twenty-first century jobs will involve technology, it makes sense to incorporate technology throughout instruction. Nonetheless, 22 percent of Americans lack digital literacy skills (Federal Communications Commission, 2010).

But teaching about information and technology is not enough. It is imperative to teach learners how to be responsible and ethical users of them. They need to be digital citizens.

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## **BACKGROUND**

### **The Information Society**

At the 2003 world summit on the Information Society, governments and world leaders “made a strong commitment towards building a people-centred, inclusive and development-oriented Information Society for all, where everyone can access, utilise and share information and knowledge” (United Nations, 2006). What constitutes an information society? Fundamentally, an information society is one in which information replaces material goods as the chief driver of socio-economics. Human intellectual capital has higher currency than material capital, or at least intellect is needed to optimize the use of material resources.

Since information and material have always been needed, what particularizes the recent notion of an information (or knowledge) society? New information and technology have vastly increased the speed, access, and interconnectedness of information worldwide. Simultaneously, information and communication have converged, such as telecommunications and broadcasting, giving rise to informational industries. At this point in history, telecommunications and media constitute one-sixth of the U. S. economy, and 30 percent of all economic growth between 1996 and 2000 was attributed to enhanced productivity based on information technology (Wilhelm, 2004). The cost of technology has dropped precipitously so that the majority of people can access it, thereby reinforcing mass media and other information entities. As a result, new forms of organization and social interaction have emerged (Webster, 2002).

This information society impacts existing institutions and cultures. The speed and globalization of information leads to constant change, which can be hard to digest and manage. The majority of jobs now involve technology and other related new skills, so that the idea of a “terminal” degree or a static skill set is becoming an outdated paradigm.

Rather, adults often need to “retool” themselves throughout their work lives. Particularly for adults who are largely digital immigrants, this new world of information, especially in electronic form, can be puzzling and overwhelming. Do they have enough background information to understand and use the *new* information?

In today’s global economy, change has become the constant, and education has the role of not only passing on existing knowledge but also preparing students to create new knowledge: to survive in a future world that has not yet been defined. Education now emphasizes lifelong learning and process-based knowledge. Likewise, literacy now encompasses reading and writing in order to survive in society. Indeed, the term “literacy” has sometimes been replaced by “multiliteracies,” and has been both parsed and broadened to explicitly call attention to technology literacy, media literacy, visual literacy, aural literacy, numeracy, and even social literacy. School library programs have responded to the notion of process-based literacies in their promotion of – and instruction in -- information literacy, which involves a number of interdependent competencies.

### **Technology Use**

In 2011 half of all adults use social networking sites, and two-thirds of adults who access the Internet use social networking sites (Madden & Zickuhr, 2011). The numbers are higher for teens: 95 percent of teens use the Internet (including 92 percent preteens); even in households of less than \$30,000 income per year, 93 percent of those teens were Internet users (Pew Internet & American Life Project, 2011). Even in 2010 400 million people had Facebook accounts, 126 million blogs exist, 50 million tweets are created daily, and 91 percent of mobile Web users access social networking sites. Additionally, 44 percent of online videos viewed are done at the workplace (Kennedy, 2010).

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