Chapter 10
Re–Establishing the School in the Light of Information Technology

Süheyla Bozkurt
Çankırı Karatekin Üniversitesi, Turkey

ABSTRACT

The aim is to open the discussion of the concept of education and school that emerged as a result of the changes in information technologies and to provide insight into the future educational institutions. Firstly, the effects of changes in the world on educational institutions were discussed. The skills needed by the world were introduced and finally the 21st century Web 1.0, 2.0, 3.0, and 4.0 technologies, which are information sharing methods that enable data sharing over the internet. In the conclusion part, a school structure where principles such as personalized ways and methods of access to information, development of creativity, acquisition of necessary methods for reasoning, integration of information with systematic attitude is proposed. For the schools of the future, it has been concluded that the elements of education such as classrooms, technique, methods, tools, and materials, and the role of the teacher should be reconsidered, and the school should be designed in a way that individuals can establish their own knowledge sphere within the boundaries of the school buildings.

INTRODUCTION

Globalization, while forcing mankind to use the new production process resulting from the use of different energy sources, also led to create new patterns of behavior. With globalization, the structure of information and data needed in everyday life has also changed and instead of the traditional approach to education and training systems, multi-media education began to be created.

While macro-economic and sociological balance, the invention and spread of globalization is the basis of the invention to society, Alvin Toffler explained these changes in his third wave theory. Toffler described the first wave as agricultural society and the second as wave industrial society. Today, there is an information society that starts with the digital age. As a result of the breakage that constitutes

DOI: 10.4018/978-1-7998-1408-5.ch010
Re-Establishing the School in the Light of Information Technology

the three waves, the human being spawned by the world has changed its qualities and human societies have begun to create common values. These values and the coexistence of different generation groups necessitate a serious paradigm shift. Education is one of the most important tools in creating strategies for establishing tomorrow. In this respect, there is a need for a serious paradigm shift in education. It is necessary to adopt an educational environment that use different information and communication technology tools and perceives the world as a school maybe even as a classroom, instead of a traditional education approach where it is necessary to be in the same room and therefore have special buildings for the occasion.

The idea of establishing “educational networks” that would enable everyone to transform every moment of life into a learning, sharing, understanding and experience was first discussed in Ivan Illich’s “Deschooling Society” in the 1970s. Illich, who sees the knowledge taught in school only as a means of contributing to the state’s remanufacturing process, expressed the idea that whoever wants to acquire any knowledge, he/she should acquire it from whoever he/she wants. These ideas, which were criticized in various ways by his contemporary colleagues and evaluated as utopia during their time, constitute the backbone of the changing paradigm in our age. Now, with the increasing use of the Internet today, people are transferring their knowledge, experience and even their skills to each other through social networking environments rather than schools. Globalization can be defined as a multi-faceted collection of functions with changes occurring with the emergence of new information technologies, or a group of concepts that deeply, more intensively and faster connect human lives, meaning “Shrinking space, shrinking time and disappearing borders” (Yurdabakan, 2002). Globalization is based on various energy sources, production processes that neutralize the old factory layout, a new family structure, a new institution that can be called an ‘electronic home’, and future school and institution structures different from traditional schools. The civilization that emerges through globalization determines new patterns of behavior; it removes individuals from standardization, central units and management styles and from situations where energy, money and power is gathered in one hand. In addition, with the acceleration of the news flow, the structure of the information and data needed in everyday life has changed (Toffler, 2006).

Globalization obliges countries to come together in the field of education as well as in the field of economics, to benefit from each other’s experiences and to produce joint projects. The form of society of the future will be shaped according to the type of people that education systems will cultivate. Countries are trying to adapt their education systems to the process of globalization and provide education in accordance with the universal values of the globalized world. In the 21st century, education was seen as the most effective tool of development and it was accepted that the most valuable investment was the investment made in human resources (Celik, 2007).

In this context, 21st century education is an education that offers all the strategic basic elements that aim to create a livable future and aims to compromise. The most important condition in education for the future is to enable the younger generations to make sense of the existing knowledge, to be conscious and to initiate and maintain change. Because the educators of the future need to be individuals who can think creatively, organize knowledge, have high global awareness, adapt to technological developments and the changes they cause, and have the ability to constantly renew themselves (Dogan, 2002). According to Freidman (2009); In a world that needs to be perceived on a flat platform, the person with the ability to adapt must be an individual who ‘learns how to learn’. These principles are: (1) learning to know, (2) learning to learn, (3) Individual Learning and (4) Learning to live together (Dogan, 2002). Dogan (2002) asserts that education in globalization is a process that enables continuous learning, knowledge, being knowledgeable, producing knowledge, and living with knowledge.