

Chapter 52

Culture, Technology, and Education in the Digital Age: A Conceptual Framework

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ABSTRACT

The accumulation of information formed by the scientific studies whose foundation stones were put during the Enlightenment period, caused the Industrial Revolution. The most important feature of the modern era was to have a deterministic science approach. The period we are in is called the Postmodern Era. General and Special Relativity Theories, new findings in Quantum Physics and the advances in communication technology caused deep and rooted social, cultural, political and economic change and transformation, and ultimately led to a significant paradigm change. The most important feature of this period is that it has a Relative science approach. While change and transformation are continuing, it is not enough to simply feel and be aware of the rapid change and transformation of culture, education and training. In this study, changes and transformations during the Renaissance up to the present has been tried to be indicated by the results of scientific studies.

INTRODUCTION

As a historically new phenomenon, globalization has emerged at various periods of global interaction in different ways for hundreds of years (Reed, 2014, p.3). As a process that has continued for hundreds of years, globalization is a process that began in the 15th century. This process was accelerated by sailors from European countries with access to the ocean, who traversed distant sea voyages and established communication and trade relations with the continents they reached. Friedman indicates that there are three great periods of globalization (Friedman, 2007, pp.9-10).

DOI: 10.4018/978-1-7998-7297-9.ch052

Globalization 1.0, 1492-1800: The world was reduced from a large scale to a medium scale. The muscle power of nations carries great importance in global coalescence. Ownership of muscle power, in accordance with the development of the industrial revolution, gave way to horse power, wind power, and steam power. Previously inaccessible places beyond the oceans were reached, merchandise with monetary value retrieved from these places livened economies. During this period, the globalization of countries and competition between countries stands out. Globalization 2.0, 1800-2000: The world shrank a little more, from medium scale to small scale. During this period, the world went through three great disasters; The Great Depression, The First World War, and The Second World War. The driving force behind this period was multinational corporations. The primary agenda is the globalization of companies. Globalization 3.0, 2000 and Beyond: The world is scaled down even further during this period, from small to miniscule scale. Individuals are now the driving force of this period. During the third age of globalization, the number of individuals raised well and whom understand the world in accordance with the age we live in within a country is considered measure of development. Individuals must be creative. They must provide alternative solutions to problems. These all depend on the individual being open to learning.

It has been approximately 500 centuries since Friedman's first instance of globalization. The tools and utilities used by people have developed rapidly in each century, and the exchange of tools and utilities have changed and transformed societies. Globalization 3.0 may be defined as the age in which individuals became globalized. Various significant authors and intellectuals express the change in mankind and societies in different terms.

Toffler emphasizes that there are three significant waves of change in the history of mankind. The first wave, the Agricultural Revolution, was a process that took approximately one thousand years. The Industrial Revolution, on the other hand, lasted three hundred years. Toffler indicates that the Third wave in which we currently reside will be complete in even less time (Toffler, 2008, p.16). The understanding and definition of time varies in each wave according to Toffler. In agricultural societies, time was sliced into shifts and time was developed based on workload. Time itself was not divided into sections such as hours, minutes, and seconds. It was during industrialization that time was accepted as a linear concept (Toffler, 2008, pp.132-134). Hours, minutes, and seconds became important concepts in the definition of time. The use of machines in production initiated the age of mass production, and time became an important factor in the procurement of raw materials, stocking products, supplying products to consumers, just in time delivery and production planning. Both production and consumption is now global, and raw materials used in production are physical objects.

Within the third wave, the primary raw material is an endless supply of knowledge and imagination. This wave period is interactive, individual, and far from massification (Toffler, 2008, p.437). Even if raw materials used in production are physical constructs, the soul and appeal lies in the knowledge and imagination used in production. During this wave, the question of whether it is the product or the image of the product that is being consumed becomes extremely relevant.

Globalization carries a political weight as much as it does economic (Hassan, 2004, p.23). Today, the concept of globalization refers primarily to two processes: The globalization of the world economy and the global dissemination of cultural forms and meanings (Tubella, 2001, p.385). Globalization brings with it inevitable change in every aspect of human life. Each new technology, when it enters global use, carries with it the culture of the place and era in which it was produced. Regardless of which aspect of life it is used in, technology and the expectations from it remain misunderstood without an understanding of the culture that it carries (Kesim, 2007, p.376).

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