Chapter 18

Educational Technologies in the Age of Transhumanism

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ABSTRACT

Transhumanism has created drastic changes in many different sectors, especially in education as it is directly related to how we grow and shape our lives. Transhumanist technologies, especially augmented reality (AR), virtual reality (VR), and artificial intelligence (AI), play an important role in education and provide new opportunities by facilitating the communication between students and teachers and students and other students in order to obtain fruitful learning outcomes. In this chapter, transhumanist technologies used in teaching and learning will be discussed with a critical analysis, and how these technologies can change the way people learn will be explained through the lens of transhumanism.

INTRODUCTION

Based on the endless human transformation, transhumanism focuses on the future along with the change in how people learn. The term “transhumanism” was first suggested by Huxley (1927), the father of transhumanism movement. He claims that if human species want, they can transcend themselves by realizing new opportunities of and for their human nature. Humanity+ (formerly World Transhumanist Association) defined transhumanism as: “the intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities” (Bostrom, 2003). Briefly, it can be defined as the use of technology for human enhancement which is mainly shaped by the modern technologies.

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Since the beginning of intellectual technological innovations, technology has served as a significant medium to improve the quality of our lives, mainly to solve the problems we face in daily life. The more advanced technology becomes, the more explicitly its impact on society is seen in the 21st century. As human-beings, we perceive that the use of these modern technologies is a need for life and they increase the quality of communication and relationships in community. As explained in Principles of Extropy, “science and technology are essential to eradicate constraints on lifespan, intelligence, personal vitality, and freedom.” (More, 2003, Section 1). On the other hand, Bostrom (2003) claims that humanism which is an intellectual and cultural movement aims at improving human-beings’ condition advancing principally technologies. It has the potential to enhance people’s different capacities such as physics, intellectualness, psychology by eliminating aging. He (Bostrom, 2003) also points out that “transhumanism can be viewed as an extension of humanism, from which it is partially derived. Humanists believe that humans matter, that individuals matter.” (p.4). As we understand from these explanations, transhumanism movement is seeking for the ways to make the things better for the humanity.

How does transhumanism affect learning and education? Transhumanism has created drastic changes in many different sectors, especially in education as it is directly related to how we grow and shape our lives. According to Edwards and Lewin (2015) “transhumanism tells us about how we think about ourselves – what we amount to and where we are going (p.3). It gives us some insight into the essence of human identity since in the technological age. The technological age has also changed the way we interact socially and caused a sudden alteration in the generational traits. This change is fundamentally located in education. As a result, the new generation will become change agents (Prensky, 2001 & Tapscott, 2009).

It is acknowledged that in a highly tech-driven society, education and technology need to go hand in hand because technology has revolutionized education. The use of technology in teaching and learning gives educators a new perspective and can fundamentally change their working practices. It challenges the somewhat monotonous and conventional teaching strategies often employed by previous generations, and gives learners the incentive to participate in the lesson by engaging them more fully. Today’s students grow up more attuned to technology, they adopt technology to their life unconsciously, which is a reality that cannot be rejected, and they are very much aware of the fact that the entire world is at their fingertips. Technology has opened up a new world for learners to create because it plays a crucial role to develop students’ 21st century skills (critical thinking, collaboration, creativity and communication). Moreover, it is also a good tool when it is used as a tool to contribute the development of students’ higher order thinking skills in their learning process (Kurt 2010). On the other hand, Winn (2002) reminds us the possible effect of technology on curricula. He claims that: ”as our technologies become more able to bring information, learning materials, even learning environments to whenever people to be, the argument can be made that we no longer need to remember what we need to know; we can simply call it up and display it when it is needed. Whether this trend spills over into the world of education to any great extent is unclear. If it does, then the impact on traditional curricula will be tremendous.” (p. 348).

It can be concluded that it provides many advantages for the learners of 21st century when technology is used properly. There are many different resources which can be benefited from for both teachers and learners. Videos, web tools, educational games are some of quite useful examples for their academic and personal development. Through these tools, learners have a chance to share their works with their peers and they can also comment on each other’s works, which increases their self-confidence and creativity in the related contexts. The more they create their own content, the more they learn by doing (experiential learning) because of the fact that learning becomes more meaningful and permanent when learners personalize the process for themselves.