Chapter 1
Ethical Dimensions of the Increasing Usage of New Technologies in Virtual Education

John Nnaji
University of the Balearic Islands, Spain

ABSTRACT

The interactivity, flexibility, and convenience offered by information and communication technologies have led to an educational paradigm shift from teacher-centered model to learner-centered whereby computers and the internet allow for active involvement of all participants in the learning process. However, the unbridled dynamics in the growth and features of these technologies poses several ethical challenges in their use in administering the essential goal of education, which is to foster a balanced development of the individual through appropriate knowledge acquisition and experience. This chapter examines various ethical conflicts involved in the prevalent usage of new technologies in virtual education. It argues that technology is malleable by nature. Therefore, fomenting mechanisms that promote transmission of socio-cultural and academic values would serve as a viable approach to resolving peculiar challenges constantly emanating from the use of technology in education.

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INTRODUCTION

One of the major areas where modern educational technologies have brought tremendous transformation is in the area of virtual education, also known as distance learning. Virtual education is the process whereby student learning processes occur in circumstances where the educator and the student are geographically separated, and the communication across this distance is accomplished by one or more forms of technology (Loane, 2001). Web and computer innovations have created increased opportunities in distance learning. Innovations such as Web 2.0 have largely been assimilated into the educational settings due to its ability to promote a more collaborative education whereby students could have a public space to interact with one another and content of the class. Recent years have witnessed enormous increase in its use and application for course work and academic purposes (Brown, 2012). Web 2.0 has been efficient in fostering learning habits like engagement, encouragement of autonomy, intentionality, reflection and community among students (Chen, Lambert & Guidry, 2010; Dunlap & Lowenthal, 2009). Studies have shown that it not only helps in fostering student learning but it also enhances academic performance and teacher-student interaction (Hrastinski & Aghaee, 2012; Junco Heiberger & Loken, 2011; Mazman & Usluel, 2010).

However, the growing influx of new technologies in virtual education has generated new dimensions to the ethical challenges witnessed in integrating technology into the learning process and achieving desired outcome. There are issues relating to identity and confidentiality, surveillance and plagiarism etc. A representative national sample of 2,142 adults aged 18 years or older surveyed in the United States showed that only 29% agree that a course taken only online provides an equal educational value compared with a course taken in person in a classroom. The remaining sixty percent disapproved online taught courses as having equal educational value as physical classroom taught courses (Parker et al., 2011, 11). More still, roughly nine out of ten presidents of colleges (89%) believe that computers and the internet have played a major role in the increase in plagiarism on papers over the past decade (Parker, Lenhart & Moore, 2011, 17). Unlike the cheating systems prior to the advent of the internet, facilities provided by internet and computer technologies have made cheating much easier in online courses (Chiesl, 2007; Young, 2010). Other ethical challenges concern big data, whereby data mining is used as a tool for surveillance and control. Regrettably, not many students know that once any data is put on the internet it stays permanently regardless of the effects it might have on the subject of the data. One of the major ethical challenges with data mining in higher education is that it mostly analyses students as a collective and hardly recognizes that they are unique individuals engaging in the learning process. Likewise, the complex algorithms developed by scientists to mine data are uncritically accepted as fact just