Chapter 24 A Media Interpretation of

the Negative Impact of Cloud Technologies

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ABSTRACT

This chapter presents a media studies interpretation of the impact of Cloud communication technologies on traditional academic achievement. According to social media critics following the "medium is the message" theory of Marshall McLuhan, the hidden "message" in the new Cloud communication education technologies conflicts with the old message of the printed textbook, the traditional medium of communication in education since the printing press in the 16^{th} and 17^{th} centuries. The chapter begins with a brief history of media technologies in education to gain understanding into the nature of this conflict and follows with a review of research and studies that document the conflict's cause and consequences with the conclusion that a major factor in the proliferation of any new media communication technology is its commercial value. Moreover, because new technologies in education are driven by commercial interests, its pedagogical value becomes secondary resulting in what social media and other critics view as the dumbing down of the American student. These social media critics contend that not only have American students been declining intellectually, computer technologies, including the Cloud Internet communication technologies are the direct cause of this decline, raising the question, "is education technology an oxymoron?" Given this analysis of media communication technologies' impact on education, the authors then offer a possible way out of the current situation by proposing a more human factors approach towards Cloud technologies based on constructivist educational and cognitive styles theory.

DISCUSSION

An educational revolution is occurring today because of Cloud communication technologies which have spread like wild fire mainly through online education technologies. Moreover, just as the rapid rise of the printed book as teaching machine during and after the Scientific Revolution caused much concern, distraught and chaos, the new Cloud learning machines are wreaking

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confusion and havoc in education today including a shift in higher education from a cognitive knowledge emphasis to an affective service mode driven by what the historian of science, David Noble (1998), called "the commodification of education." To document this hypothesis of the dumbing down and commodification of education the chapter begins with a brief history of educators trying to put old content and teaching methods into new media technologies with little success and unintended consequences.

A Dubious Record of Using Media for Education Purposes

National Educational Television (NET) was an American educational broadcast television network owned by the Ford Foundation and operated from 1954 to 1970 before being replaced by the Public Broadcasting Service (PBS). PBS is now more known for its cultural programs, social and political commentary and international news with little pretense of operating as a major player in education. The original aim of its predecessor, NET (2012), however, was educational and the program was nicknamed the "University of the Air" because of its treating humanistic educational subjects in depth, including hour-long interviews with people of literary and historical importance. In spite of the great amount of expenditure for the broadcasting station, however, NET was known for its excruciating boring content and attracted few viewers. Consequently in 1963 because of its low ratings, National Educational Television changed its format by airing controversial, hardhitting documentaries that explored numerous social issues of the day such as poverty and racism. It was during this period when the NET became PBS, having shifted completely from a formal education role to more entertainment venues and public service programs centered on politics, social issues, and news.

Sesame Street

PBS, however, did not entirely give up its original educational role and in 1966 broadcasted its wellknown children's education program Sesame Street with the idea of creating a children's show that would "master the addictive qualities of television and do something good with them" (Davis, 2008, p. 8). The altruistic part of the concept, funded with substantial grants from the Carnegie Foundation, the Ford Foundation, and the U.S. Government, was to help young children learn. After two years of research and development, the recipients of this funding created and produced Sesame Street in 1969. According to Palmer and Fisch (2001), it was the first preschool educational television program to base its contents and production values on unprecedented laboratory and formative research.

However, from the beginning, unlike National Educational Television programs, Sesame Street focused on affective goals while addressing cognitive goals indirectly with the belief that doing so would increase children's self-esteem and feelings of competency and, by realizing such objectives, the cognitive goal of learning to read and write would follow automatically. In time, the goal of increasing self-esteem was followed by other affective goals such as promoting ethnic diversity, a greater sense of community and ecological awareness (Gikow, 2009), again based on the premise that providing such a context will automatically result in increased learning. Sesame Street's significance in the history of media and education is a case of the tail wagging the dog where its entertainment value and goals overwhelmed its educational intent resulting in the transforming education to the idea the authors of this chapter call the "Sesame Street Theory of Learning." That education "law" is: "keep them entertained long enough and maybe something will stick," a dictum, the journalist sociologist, Malcolm Gladwell (2000) called "The Stickiness Factor".

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