Chapter 49 Perceived Neutrality of Technology and its Potential Impact: Recontextualizing Technology into Adult Learning Settings Using a Cultural Studies Approach

Jim I. Berger Western Kentucky University, USA

ABSTRACT

This chapter seeks to define technology, explore various views of technology, including feminist and afro-centric perspectives, and to identify the cultural dimensions of technology and their impact on adults as learners. I explore the viewpoints of several philosophers and researchers in the field of science and technology studies and use these to show how technology is embedded with cultural values. I propose using a cultural studies model to define various ways to study technology and its impact on adult learners and draw from these to propose ways of examining technology and users, and a means of researching the many "moments of intersection" between technology, adult learners and facilitators.

INTRODUCTION

Today's technology is often seen as a neutral, value-free artifact used as a means of enhancing learning with adults (Bowers, 1988). In fact, McClintock, quoted by Bowers (1988) says that "computers are artifacts, designed and manufactured tools, whereas education is a preeminently cultural phenomenon, something that takes place through and for people" (p. 28). However, technology has been shown to be an artifact of culture, and therefore contains the values of that culture. In today's society, technology represents the values of the dominant culture and supports the goals and ambitions of the hegemony while suppressing marginalized groups and individuals. Although much of the literature on the use of technology promotes it as a positive tool that enhances learning and provides an attractive and meaningful way for adult learners to engage with the material being learned, the preponderance of

DOI: 10.4018/978-1-61692-906-0.ch049

the literature fails to describe ways in which technology impacts adult learners and asks its users to conform to its values and adopt its method of production. The purpose of this chapter is to take a critical view of the development of technology as a cultural artifact that is deeply imbedded in the mainstream and serves the needs of the hegemony. This chapter examines the various views of technology and delineates its potential impact on adult learners. Finally, this chapter concludes with a description of means to study technology in adult education settings and suggests various points of interaction to be studied.

DEFINITIONS OF TECHNOLOGY

The word "technology" comes from the Greek word "Techne" which refers to the process of "bringing forth into presencing, a mode of revealing" (Heidegger, 1977, p. xxv). This was a common view of technology adopted by craftspeople who used tools to bring out the qualities of the material they were shaping. Similarly, today's technology is used to bring out the hidden qualities of material or information. Microscopes reveal what is hidden in the minutia of life, and telescopes bring closer the details of heavenly objects millions of miles away. The development of modern sciences arose as a result of the need to order nature and classify every part of it to reveal and release every power within. Technology assists in that process by helping reveal and control nature and bring it under man's power.

Heidegger (1977) believes that science and technology are dependent on each other and treat all before them with objectivity. He posits two definitions of technology: first, technology is a means to an end; second, technology is a human activity. He sees technology not as just a tool, but as a way of bringing forth the hidden qualities of an object. An example is a craftsperson, using technological tools, bringing out particular qualities of an object. The craftsperson can be seen as "revealing" the objects qualities.

Ray Thomas (1995) claims that technology is "about how society uses science" (p. 11). He goes on to explain that technology is a social activity and that social processes necessarily shape the development of such technologies as information technologies. Misa (2003) argues that technology is a result of "human desires and ambitions, as solutions to complex problems, and as interacting networks and systems" (p. 3). He elaborates that technologies intermingle with society and culture to influence each other, thus eliciting a variety of emotions ranging from resistance to enthusiasm.

I see technology as another expression of a culture, much like art, architecture, music, and literature, of the society developing it. If you consider each of the above examples, you will see that each culture defines and shapes its expressions to broadcast specific messages and values esteemed within society. Technology carries similar messages by virtue of its design and incorporation into our society. Instead of examining technology by what it does and how it is used, I would like to explore the various views of technology and its relationship to culture and politics.

VIEWS OF TECHNOLOGY

Views of technology can typically be divided into four categories (Feenberg, 1991). In the first, Instrumental Theory, technology is viewed as a means to an end; technology is neutral. In the instrumental view, neutrality of technology implies four points. First, technology is indifferent to the ends it can be used to attain. How can it be otherwise? It is only an artifact or a combination of materials that make up a tool. Technology is not concerned with the politics of societies of capitalist or socialist cultures; it only exists to serve the user and her/his purpose. Third, the rational nature of technology is the cause of technology's neutrality and the universal truth it 12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

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