

Chapter 13

Media Ecology and the 21st Century Classroom

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ABSTRACT

This chapter will use media ecology theory to examine educational technology and provide tools for educators to think critically about how to positively affect the learning climate through media choices. In order to do this, the chapter will provide an overview of media ecology theory and explain how media can be studied as environments. Next the chapter will look at several educational trends which are having a media ecological impact in current education. Specifically, the chapter will consider online, hybrid and flipped classrooms as part of the educational media ecology. Next the chapter will examine several emerging media technologies which are poised to have an intense media ecological impact on education. Finally, the chapter will provide researchers and educators with a few specific guidelines to use media ecology in order to think critically about decisions regarding educational media in the classroom.

INTRODUCTION

“Media ecology is an intellectually vibrant, dynamic, and growing discipline within communication studies” (Forsberg, 2009, p. 137). It is a body of theory which studies media as environments (Postman, 1970). These environments do more than set the stage for what we communicate. Communication itself is part and parcel of the environment created. As McLuhan and Fiore wrote: “All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical and social consequences that they leave none

of us untouched, unaffected, unaltered” (1967, p. 26). In the 21st century, new media are being developed on an almost daily basis. All of these media devices “have a rhetoric all their own and that rhetoric comes with its own epistemology; that is, its own way of making sense of the world” (Cline, 2012, p. 2).

For educators, those people whose job it is to guide and direct burgeoning epistemologies, thinking critically about media used in the classroom and the ecology it creates is essential. Administrators, course designers, and instructors need to be aware that the latest technology is not just a new way to deliver the same old

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information: “The media ecology of education, then, investigates human communication in and under the auspices of schools and school systems broadly defined, insisting that use of educational media is not human-machine interaction merely” (Ross, 2009, p. 147). Rather, it is the production of entirely different knowledge because it is produced and derived differently.

The purpose of this chapter is to provide an understanding of the tools and methods of the media ecologist and make them available for the educator. In order to accomplish this the chapter will provide an overview of the theory of media ecology theory since its emergence in the late 1960’s through it’s coming of age at the turn of the century and the most contemporary applications and inceptions of media ecology theory.

Next the chapter will examine recent educational trends and their media ecological impact on student epistemologies. Specifically, the paper will look at the emergence of online learning, hybrid learning and flipped classrooms. The chapter will show the ways in which the rise of certain media created a rhetorical situation which prompted the emergence of these new forms of learning. It will also show that sometimes these trends have been adopted without regard to their moral, economic and (most importantly for educators) epistemological impacts on students. Comparisons between the media ecologies which positioned those failures and the media ecologies that exist where learning is successful in these emerging educational modes will provide a context for examining new educational modes and the media ecological impact that they may have.

This will be accomplished by examining several up and coming media technologies that are poised to change the educational landscape: 3D printing, cloud computing, and mobile computing (with special attention paid to hand-held devices and wearables). Each of these new media provides exciting and obvious opportunities for educators which will be briefly discussed. More importantly, however, each new media not only

provides extensions, but amputations as well (McLuhan, 1965). The introduction of these new media into the students’ media ecology will introduce new means of knowledge production and place new epistemological limits or barriers for many students as well. The chapter will provide examples of how each of these technologies can be considered according to its media ecological impact.

Finally, it must be recognized that the media of the future will be media that do not even seem possible to us today. For that reason, it becomes paramount that educators and researchers are provided with the means and materials to think about the media ecological impact of educational tools that do not even exist today. The chapter will provide a checklist of tools which will aid educators in thinking critically about the impacts of media before they are added to the media ecology of the classroom.

BACKGROUND

Media ecology is one way of looking at communication media and technology from a philosophical, humanities-based point of view. The goal is not to simply look at how media influence our lives, but the ways in which our lives and our communication intertwine in such a way that the media are our lives. While it is probably possible to find the roots of this theoretical body as early as the Greek sophistic tradition, the work of Marshall McLuhan in the 1960’s seems to have brought the intellectual movement to fruition. It was McLuhan who argued that “it is the medium that shapes and controls the scale and form of human association and action. The content or uses of such media are as diverse as they are ineffectual in shaping the form of human association” (McLuhan, 1965, p. 9). McLuhan argues here that the content of a particular medium is not what will shape how people interact with it; it is the medium itself that seems to control human interaction.

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