

Chapter 19

Lessons Learned from Semiotics: Social and Cultural Landmarks for Transformative Elearning

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ABSTRACT

The primary purpose of this study is to see if graphic enhancements and navigation could enhance learning and reduce cognitive load to make it easier for at-risk, lower socio-economic, and ethnic self-identity groups of students to have a positive experience in online courses and increase the likelihood they will succeed in online degree programs. Using metaphors, signage, such as parietal art, and icons to provide congruency in the design and navigation of these programs could help students break down inhibitions and mediate new content and technology experiences with their existing knowledge. The study uses appreciative inquiry and development design methodologies to examine whether embedded semiotics and carefully designed metaphors could help students in the online courses feel more comfortable and increase the likelihood of their course completion. The findings of the study support the use of icons, metaphors and other forms of semiotics to transfer and mediate prior knowledge with new content knowledge, particularly in elearning.

INTRODUCTION

Paleolithic educators used pictures, symbols, and stories to convey hunts, customs, and legacies. These ancient semiotic tools transmitted meaning to all observers long before there were written texts. There were even patterns in the art, horses first (representing spring), aurochs (summer), then

stags (winter); menacing predators, such as bears and lions, were relegated to drawings in the back recesses of the cave. Today, parietal (cave) art still resonates because it reminds us of man's journey through time and of our place in the universe. While rich in traditions, the iconography and the accompanying myths have been relegated to history; few lessons have been retained, let alone taught, from these ancestral lessons. Yet there still seems to be "a symbolic, cultural dimension

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to organizational life...the symbolic or cultural dimension of organizational life motivates members...provides direction and a degree of cohesion within a group” (Donmoyer, 1997, p.2). The social dimensions of learning (Anderson, Reder & Simon, 1996) are both historical and prescient. Sacred texts, heroes, signs and signals still have meaning, yet today, with so much information and education available online to hundreds of thousands of students, there has been little attention paid to semiotics in instructional design, or why these emblems and stories of the past that resonated with the so many of the generations have been ignored. Accordingly, because there seemed to be little research on the effects of semiotics in instructional design, the objective of the study was to examine pansemiotics to assess whether symbolic devices embedded in online courses could have positive subconscious influences on students’ learning and course completion.

BACKGROUND

Defining and Situating Semiotics

Semiotics is the study of patterned human communication behavior, including: auditory/vocabulary, including writing and narratives; language; numerical figures; proxemics, such as facial expressions, touch, and artificial limb extensions; signs, and symbols (Merriam-Webster, 2009a). As sociocultural tools, the signs and symbols, etc., included in semiotics, take on enriched meaning, affecting the functions of human consciousness as well as their environment.

Research into semiotics and technology integration suggested there could be strong positive effects on students’ learning when online courseware included familiar signs, symbols and narratives (Eisner, 1997; Gannon Cook, 1998; Gannon-Cook & Crawford, 2007; Jonassen, Peck, & Wilson, 1999; Salomon, 1997; Snow, 1997; Zaltman, 1997; Zaltman & Zaltman, 2008). Earlier research had

revealed that learning occurred through a continual interplay between cognitive and affective factors (Pintrich, Marx, & Boyle, 1993), and these factors were also affected by situated contexts that could play a significant role in the interplay of these factors (Hidi & Baird, 1986; Garner & Gillingham, 1992; Resnick, 1991; Rogoff, 1994; Wade & Adams, 1990). Findings suggested that students attributed partial success to structured narration that consisted of story structure and schema which could include semiotic elements (Mandl et al, 1984). “Because key elements of narratives are consistent from story to story, readers have a familiar structure that can guide their processing and enhance their memories” (Alexander & Jetton, 1996, p.105). These factors seemed to have particular relevance in on-line courses because of the students’ inability to see the teacher and/or other students, yet often instructional designers ignore these early semiotic tools that risk being sidelined or eliminated in favor of creating courses with the newest state-of-the-art technologies.

Speech and Written Text

Speech, written texts, including writing, language, and narratives, pictures, signs, and symbols all comprise semiotics and all provide major contributions to human communication. Vico pointed out that the development of language was strongly influenced by metaphors (Turner, 1993). Ferdinand de Saussure, viewed as the founder of semiotics (1993), held that language is a system that carries the culture’s assemblage of priorities, values, and views of the world. Levi-Strauss (1970) took this further, stating “kinship terms are elements of meaning... (however) they acquire meaning only if they are integrated into systems (1970, p.5).” He posited that if forms are recognized as the same by both ancient and modern minds, the unconscious structure underlying these forms need to be studied to find valid interpretations that can be generically applicable across cultures (Dant, 1991).

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