Chapter LXXVI
Education and Exploitation Off the Virtual Trail to Oregon

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ABSTRACT

By retracing the tracks of the popular educational game, the Oregon Trail, this chapter presents both positive and negative realities of the incorporation of computer-based education that will necessitate students venturing away from safe, closed systems to access information in the open frontier of the Internet. Information presentation is increasingly multimodal. The fidelity of that information is not always clear. Access to information, though often assumed, is not always available. Individuals' selectivity to the variety of information can influence how it is internalized. Exposure to violent and sexual content can result in desensitization. Bias opens opportunity for fragmentation. And our connections to others, though overwhelmingly positive, also make us vulnerable to aggression and exploitation. Certain research and news stories presented here detail the most disturbing acts of humankind; those that children must be safeguarded against.

INTRODUCTION

Setting out on the *Oregon Trail* has been the first human-computer interaction for many elementary school children in the United States. The history of the original game can quickly be recalled from Wikipedia (if a person can indeed trust the fidelity of that as a reference source) and is slightly more detailed than any one person's own personal account. It was the first time we had heard of dysentery, and though having no idea what it was, we learned that it could be quite painful and could lead to death, as it did for so many young students on their first trek across

the American northwest. A video game that the teacher allowed you to play in class; the idea of it seemed too good to be true. And now, 160 years later, as per the timeline of the game, we set off again down that same familiar trail. On this journey however, students will increasingly be able to forage out on their own. Gaming systems continue to incorporate wireless communication platforms that extend beyond their controllers. As they acquire more autonomy on networked computers, students will, either by expectation or free will, leave closed systems for the open Internet. Their electronic-based learning is not limited to the time they spend in front of the schools' computers. The focus of this chapter is to look past the positive aspects of this action and highlight the potential hazards; because at that point, the dangers are no longer fictional and acknowledging them is imperative. In this chapter we will analogously explore the potentials and pitfalls of allowing students' access to the Internet. Communication, both textual and visual, is the manifestation of education. In communication, the transmission of information and our connection to others present dualistic effects that educators must consider as they set out to teach future generations growing up in this world of information technology.

An active model of communication simply details the passage of information from source to receiver. This passage requires that the presented information be accessible to the receiver, allowing for internalization. Presentation of information can be multimodal, portrayed independently or in any combination of oration, text, and visual communication. The fidelity of the presented information is often subject to question based on the intension and credibility of the source and its dilution across the channel. Access, though often assumed, is not always available. Internalization can be both positive, increasing empathetic appreciation and openness to heterogeneity, or negative, making individuals susceptible of fragmentation, desensitization, and addiction. Each of these then

in turn dramatically impacts the way the receiver connects with others.

In that reconnection with the source or with another individual, interaction is established. By completing this cycle of communication, a source and receiver are able to engage in transactional interdependence allowing for both positive and negative social exchange. Positive social connectedness emerges in the form of the sense of community, perceived empathy, and interrelated teamwork. However, by connecting ourselves to others, humankind also reveals its dark interpersonal side. Behavioral antisocialism plays out in both aggression toward and exploitation of others. Verbal and physical aggression, as well as financial and sexual exploitation, can physically and psychologically harm a person in irreversible ways. Awareness of dualistic effects communication can have on interactants provides both optimism and caution as we set out on this familiar trail of mediated education.

INFORMATION PRESENTATION

Decisions needed to be made at the outset of the *Oregon Trail.* Resources were limited and without experience, misappropriation of funds was highly likely. Without a clear understanding of the eminent dangers and challenges, appropriate amounts of needed food and supplies were typically miscalculated and pioneers died. You were almost certain to parish in your first attempt at the game. The future convergence of electronic gaming and education is most certainly centered on the multimodal information presented to students. Information is not sufficient as knowledge, but it is necessary. Games continue to regenerate and incorporate real-world content and imagery. Today, the Internet allows the human collective the ability of present seemingly infinite amounts of information. Most of that information is positive and advances innovation and creativity. But

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