# Chapter XVIII Digital Epistemologies and Classroom Multiliteracies

# **Heather Lotherington**

York University, Toronto, Canada

### **ABSTRACT**

Contemporary conceptualizations of literacy as socially and culturally situated practice must be framed in our digitally mediated, glocalized societies where networked communication technologies have created innovative texts opening up new literacies and demanding new pedagogies. This chapter discusses a Toronto-based program of collaborative school—university action research that aims to develop a pedagogy of multiliteracies in an urban elementary school. The project engaging our research collective is about guiding children to rewrite traditional children's stories as individualized digital narratives that enfold their cultural understandings and community languages. Situated within current epistemological questions about what it means to become a literate person in the 21st century, our project responds to reciprocal educational challenges: How can we facilitate the acquisition of relevant literacies for contemporary children experiencing divergent home, school, community, and societal practices? How can we redesign curricula and assessment to be socially responsive and responsible?

### INTRODUCTION

Nutscracker

That's the whole point. When the helmet and the Helmholtz fuse into a single whole, you can edit the reader as well as the book, if you get my meaning. That's why we say editing technology can be external or internal. Although there's no clear boundary between them, of course. (Pelevin, 2006, p. 99)

Victor Pelevin's (2006) contemporary rewriting of *The Myth of Theseus and the Minotaur*, built around an Internet chat, introduces the epistemological terrain of the multiliteracies study discussed in this chapter. Nutscracker's

description of the Helmholtz, who is a cyborg version of the Minotaur, is of a physical being fused to digital hardware who thinks through a synergetic cyber-communications processing facility. Nutscracker meets his fellow maze inmates in a chat room where they collaboratively piece together the physical world of their prison and a description of their captor. Their communications take place in digital space though they are trapped in a physical landscape that none can see from anything but a prisoner's perspective.

The research collective contributing to the study discussed in this chapter, in common with Nutscracker and his digital chat partners, uses contemporary digital technologies to extend human communication capabilities and networks and to look at learning outside the box. New language and literacy processing opportunities through digital technologies invite radically new ways of thinking about language, literacy, and texts and, in turn, require new ways of teaching literacy. Our study experiments with how digital technologies can facilitate a broader concept of literacy in the classroom that entertains children's multilingual and multicultural perspectives. In so doing, our research creates a larger picture of learning to read and write than the curricular landscape of literacy presently describes.

Contemporary digital technologies have opened up innovative communicative possibilities that create the conditions for novel literacies, requiring ways of thinking about and teaching literacy in school. Members of society engage in digital literacies without conscious notice in quotidian social life in many ways, for example, by navigating screen-based instructions to withdraw cash from an ATM (automatic teller machine); downloading an application form from an Internet site; looking up information or social contacts online; purchasing tickets, whether for a movie or a parking space, from an on-site digital dispenser; and cyber-shopping for goods, services, or even a romantic partner. People in the street, as the Helmholtz described by Nutscracker, are literally attached to hardware, such as mobile phones, palm computers, portable digital audio (MP3) players, and other pocket-sized hardware from handheld game devices to pagers, in a seamless machine-human interface that fundamentally changes the relationship between mind and communications technologies. This portrayal of social literacies is, however, at odds with educational paradigms of literacy where children in elementary schools are still learning cursive writing as primary literacy interface, and negotiating pencil and paper tests to determine their success in achieving literacy. The disjuncture between school and social literacies is widening beyond recognition as children take homework back to a home where they play computer games, engage in multiple instant messaging chats, manage profiles on social networking services such as Facebook and MySpace, and plug themselves into a variety of digital media while completing paper and pencil school assignments. Literacy in 21st century education needs to be rewritten.

At Joyce Public School (JPS) in the Greater Toronto Area (GTA), I have been working with teachers to create pedagogical models that engage children in rewriting traditional stories with a contemporary flair. Our story-rewriting project is the focus of a program of collaborative action research that aims to conceptualize and develop new possibilities for teaching contemporary literacies in the elementary classroom. Our research collective is a learning community comprising elementary school teachers and associated school staff, university faculty and student researchers, and community members who are connected locally and digitally. The mission of our project is to design a community-based pedagogy of multiliteracies, following The New London Group's (NLG, 1996) challenge to reconceptualize epistemological and pedagogical thinking about literacy education. Our project is aimed at elementary school children living in a culturally and linguistically diverse urban metropolis.

18 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: <a href="www.igi-global.com/chapter/digital-epistemologies-classroom-multiliteracies/19848">www.igi-global.com/chapter/digital-epistemologies-classroom-multiliteracies/19848</a>

# Related Content

SCARCE: An Adaptive Hypermedia Environment Based on Virtual Documents and Semantic Web Serge Garlatti, Sébastien Iskaland Philippe Tanguy (2005). *Adaptable and Adaptive Hypermedia Systems (pp. 206-224).* 

www.irma-international.org/chapter/scarce-adaptive-hypermedia-environment-based/4186

# Context-Based Interpretation and Indexing of Video Data

A. Mittal, Cheong Loong Fah, Ashraf Kassimand Krishnan V. Pagalthivarthi (2008). *Multimedia Technologies: Concepts, Methodologies, Tools, and Applications (pp. 527-546).* 

www.irma-international.org/chapter/context-based-interpretation-indexing-video/27105

### **Tertiary Storage Devices**

Phillip K.C. Tse (2008). Multimedia Information Storage and Retrieval: Techniques and Technologies (pp. 145-155).

www.irma-international.org/chapter/tertiary-storage-devices/27009

### Home Media Access with Heterogeneous Devices

Tayeb Lemlouma (2018). Digital Multimedia: Concepts, Methodologies, Tools, and Applications (pp. 1492-1507).

www.irma-international.org/chapter/home-media-access-with-heterogeneous-devices/189538

# Cost Models for Bitstream Access Service

Klaus D. Hackbarth, Laura Rodríguez de Lopeand Gabriele Kulenkampff (2009). *Encyclopedia of Multimedia Technology and Networking, Second Edition (pp. 276-285).* 

www.irma-international.org/chapter/cost-models-bitstream-access-service/17412