Chapter 11
Observations of Elementary and Middle School Children Interacting With Computers

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ABSTRACT

This chapter summarizes exploratory field observations with interpretive comments in three Chicago area schools (two elementary and one middle) and explores the relationship between children's literacy, use of computers, and the world wide web. These observations provide better understand of how the world wide web could be used to support children's literacy development. The cases provide detail related phenomena that could be further explored and achieve fuller understanding of the role computer technology plays in children's classroom learning and advocates for the holistic study of the wellbeing in children.

INTRODUCTION

This paper summarizes exploratory field observations with interpretive comments in three Chicago area schools (two elementary and one middle) and is motivated by my interest in the relationship between children's literacy, their use of computers, and the World Wide Web. These observations were to support a post-doctoral research project at a research foundation that I worked on in 1999-2000. Originally, these observations that follow were part of pilot work to better understand how the World Wide Web could be used to support children's literacy development. Ultimately, this literacy project was cancelled by the Foundation due to reorganization of its priorities. However, many of these initial observations highlighted interesting phenomena that at the time seemed useful to me in thinking about a variety of children's orientations to ways of being in relation to computer hardware, software, and the World Wide Web. The theoretical framework/lens I used was rooted in Piaget's constructivist view of cognition (Piaget, 1952; Piaget and Inhelder, 1969) in children's psychological development. The field notes were created following typical anthropological approach in the sense of "to preserve the sense of evidence" (Pelto, 1970, p. 93).

I recorded events, comments, and interactions as they seemed to me relevant to the general question: "What is the relationship of the children I am observing to computers and the Internet?" First came a detailed description, then interpretation. I made penciled notes on-the-fly using a yellow 8-1/2' x 11' inch plainly visible lined paper pad. I wrote mostly in the center of each numbered and dated page and left the edges blank for filling in detail later the same day. I tried to be sensitive as well to the general orientation of the school setting, teachers and the librarians, the general school climate, and how the school library was situated in the building. I also had short conversations with teachers and the school librarians. At the end of the day, I added details from memory to my notes. All names in the case write-ups are pseudonyms. When visiting the schools, I was introduced to the children by teachers and school librarians as a researcher interested in how they (children) used computers. Beyond that, I was a relatively non-obtrusive observer of the children's school day. In all cases, school personnel were very helpful, guiding me to areas where observation might be optimal at certain times of the day with different classes. I was given freedom to walk around the school library and computer lab as I wished. My general approach was to observe openly without written preformed categories or checklists (Smith, 1968; Goodwin, 1999) and developed field notes to again, "preserve the sense of evidence." (Pelto, 1970, p. 93).

This collection of illuminative narrative cases was developed from these field notes and are focused on individuals and small groups of children working with computers. I thought about the kind of natural experience the children might be having in this specialized school setting of computer desktop workstations apart from student desk areas. Taken together, the cases suggest a rich variety of largely unexamined relationships regarding social and emotional well-being in school and a range of ways children interact with computers and the Internet. These cases, I believe, barely scratch the surface of how computer technology, children, and literacy interrelate. These observations also opened my eyes again to the incredible richness in children's learning everywhere I looked. There are successes and failures in teaching, but often teachers do not know why some students succeed and some fail. I believe detailed inquiry into student learning in the classroom context by teachers and researchers working together can beneficially inform the teaching/learning process (e.g., in making use of qualitative interviews/observation, especially in conjunction with holistically derived teacher-directed action research) (Goodwin, 1999).

I hope these cases will encourage other teachers to observe more closely with deeper empathy what children are experiencing in the computer technology-related instructional units. All names and locations are pseudonyms. School administrator informed consent was obtained prior to the school visit.

EXAMPLES OF GENERAL ORIENTATIONS TOWARD COMPUTER USE IN INDIVIDUAL SCHOOL CHILDREN

Intense Engagement: Amy (3rd Grade, Ed Elementary School)

Amy's third grade class and teacher had just settled into the computer lab, a converted meeting room with double doors located on the west side of the school library. Amy sat next to the end of a row of computers on the right side of the computer lab. What caught my attention, as I looked around at the other 14 children all working on a "learning to keyboard" program, was Amy's speed at hunting and pecking and with both her left and right two index fingers. The boy to her right was also hunting and pecking and he was faster at it too, but for him it appeared more routine. He was slightly slouched as if in an easy chair, laid back, and was rhythmic and mechanical in his typing. There wasn't any hint that he felt

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